The Cavendish Lecture

ON

ELIMINATION AND ITS USES IN PREVENTING AND CURING DISEASE.

Delivered before the West London Medico-Chirurgical Society, June 12th, 1891,

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MR PRESIDENT AND GENTLEMEN,—It seems to me that one of the most marvellous definitions ever given is that of dirt as "matter in the wrong place." The matter need not be in itself objectionable; it may be, on the contrary, exceedingly valuable and useful, provided it be in its proper place and fulfilling its proper function, and yet it becomes dirt at once when put in the wrong place. The pipeclay which is used to keep the soldier's belt clean at once becomes dirt when it gets upon his uniform, and the blacking which lends lustre to our boots and is used "to keep them clean," as it is termed, at once assumes the character of dirt, and exceedingly objectionable dirt, if we put up those boots on a chintz covered sofa, leaving a black smudge on the fair surface of the fabric. The utility of things which most people would agree to call dirt is shown by the care employed in sifting cinders, and in separating rags and bones from the contents of our dustbins; but the dust contained in these bins is a most unmitigated nuisance to the unfortunate householder who cannot get it removed. I do not know any topic more calculated to excite a lively conversation, amongst householders in London at any rate, than those of dustbins and drains. The mere mention of either of these words has an effect quite different from that of the "apple of discord," for its effect is a most wondrous concord, everyone having the same tale to tell of the neglect of the dustmen and the iniquities of plumbers. My own experiences in the way of dustbins appear to be exactly those of everyone else I meet, and we all agree that although we pay heavy rates, and are still further mulcted by the necessity of having to tip the dustman at every visit, we cannot get our dustbins emptied regularly, and our complaints receive no attention whatever. So much is this the case that one medical friend of mine threatened to empty his dustbin into the street, and let the vestry sue him as a nuisance. Drains are, if possible, an even greater cause of complaint. The difficulties of getting them put right are almost insuperable, and although Mr. Teale of Leeds has done good service to sanitary science by making the "Dangers to Health," of which his book treats, visible to the eye, some people still believe that the only way to eradicate the dangers of badly made cesspools and defective pipes is to hang two or three plumbers as an example to others. The dustbins are the receptacles for the solid refuse of our houses—the dust, the ashes, the cinders, the odds and ends of dry material which, accumulating in our rooms, would render them dirty and disagreeable; but the drain-pipes are the channel by which the soluble and liquid refuse of our houses is carried away, and any interference with them is still more serious than the non-removal of our dust. It is only in highly complex communities that the difficulty of removing refuse, either solid or liquid, is felt to an extreme degree. A single individual travelling all by himself in the country has no difficulty whatever. In villages the difficulties are but slight, and even in large camps they may be overcome in a very simple manner, as is shown by that hygienic law of Moses: "Thou shalt have a paddle upon thy weapon; and it shall be, when thou wilt ease thyself abroad, thou shalt dig therewith, and shalt turn back and cover that which cometh from thee."[1] But in cities like London, Paris, Berlin, or Vienna the difficulty of eliminating the refuse is very great, and enormous expenditure is required to effect it. Each unit in the population contributes to the total amount, and as the population grows the difficulty increases. But in large towns the whole refuse of a house does not at once find its way into the dustbin or the sink. The worn out furniture, the cast-off clothes, and disused utensils which are lumber and rubbish in the houses of the rich, find their way as useful articles into those of the poor, and after a further period of service descend still lower in the scale of society, passing perhaps through many grades before they are thrown away as absolutely worthless. Even after their fragments have found their way into the dust-heap they are again picked up by scavengers, conveyed to mills or factories, and after being there transformed into a different shape, are again employed for other purposes.

Now there is a wondrous unity in life and living beings, and the same process which we find going on in towns and villages occurs also in the living beings which compose their population. Nay more, it exists in the tissues and cells of which these living bodies are composed; and even in the unicellular organisms which constitute the simplest form of life on the surface of this globe. These unicellular organisms are now attracting much attention, for they are the earth's scavengers, who tear up the old clothes, crush up the old bones, and burn off the ashes of the world, which would otherwise accumulate and render life impossible. But these lowly organisms are not content with breaking up dead matter; they magnify their office, and by attacking living beings they produce diseases which may lead to the death, dissolution, and ultimately to the complete disappearance of the man or beast they attack. Such unicellular organisms as a rule have no difficulty in getting rid of the products of waste which are formed by them as well as by the higher animals. As a rule they live and grow in some fluid, and their own movement through the fluid brings them in contact with fresh layers of it, from which they obtain new nutriment, and which also washes away their refuse. Should this refuse accumulate to too great an extent, as it does when the fluid is too crowded by the presence of an enormous number of microbes, the refuse products will kill these microbes, just as the unfortunate persons confined in the Black Hole of Calcutta were suffocated by the products of their own respiration. But just as the broken victuals and old clothes of the rich, regarded by them as simply rubbish, can be utilised by their poorer neighbours, so the fluid in which one class of microbes can no longer grow forms a most suitable soil for others. Thus the liquid in which yeast can no longer grow forms a most suitable soil for the acetic bacillus, and when this in turn has ceased to grow its place is taken by putrefactive bacilli, and these in their turn are succeeded by moulds. When unicellular organisms become agglomerated together, as in sponges, the difficulty which each organism has in getting rid of its waste material, and in obtaining new nutriment, is increased, and those cells which are unfavourably placed would probably die very quickly, either from lack of nutriment or from suffocation by their own waste, were it not that this untoward issue is provided against by a peculiar arrangement. Some of the cells become furnished with cilia, which keep up a constant current of water through the interstices of the sponge and thus bring the fixed cells into a similarly favourable condition as their free-swimming congeners, with this difference, that, in the case of the free-swimming cell, it moves through the fluid in which it lives, while in the case of the fixed cell the fluid flows over it. This latter arrangement is the one which exists in most of the cells of the higher organisms, such as man. Although some cells, like the leucocytes of the blood, swim freely through the fluid which nourishes them, all the fixed cells, of which the tissues are formed, are nourished by the lymph which flows around them or between them. A constant current is kept up in this lymph by the mere pressure due to exudation from the capillaries on the one hand, and to absorption by the veins and lymphatics on the other, aided by pressure on the tissues caused by movements. Only in one place—the central canal of the spinal cord, where the delicacy of the tissues requires a constant flow of nutrient fluid, and yet demands an absence of pressure which might injure the nervous structures—is the current of lymph kept up by ciliary motion, as it is in sponges. As Claude Bernard well puts it, the cells of which our bodies are composed do not live in air. They live in a liquid internal medium, which at the same time supplies nutriment and oxygen, and removes waste products. So long as this nutritive medium continues to fulfil its functions, the cells of which our bodies are composed live and grow with

[1] Deut. xxiii., 13.

perfect indifference to our external surroundings; and so long as a man holds his breath, so that the fluid medium is unaltered, it is a matter of indifference whether he has his head in a bag of oxygen or in a brewer's vat filled with carbolic acid. But the fluid medium or lymph very quickly becomes altered by the living cells which drain it of its oxygen and pour into it their waste products, and in the course of a few minutes it would become quite unable to support their life were it not gaining supplies from without of oxygen and nutriment, and eliminating or destroying the waste products poured into it. I say destroying, because when the lymph passes into the blood the waste products appear, to a certain extent at least, to undergo oxidation, just as the sewage of villages high up the Thames becomes oxidised or destroyed before it reaches the mouth of the river or the open sea. But various conditions may tend to interfere more or less with the discharge of the sewage of the cells, as well as with their supply of nutriment and oxygen, and it is with this discharge of sewage or elimination of waste products from the cells which compose our tissues, into the blood and its excretion from the body as a whole, that we have particularly to do to-day.

It is not merely the elimination of the natural waste products of our tissues that we have to consider, but the elimination of waste products formed within our bodies by disease germs which have entered them. These disease germs, consisting as they do chiefly of bacilli or micrococci, resemble the cells of our bodies in the fact that they also may be destroyed by their own waste products; but when they enter our bodies, the substances they produce, harmful though they might be, if in excess, to the bacilli themselves, are usually still more harmful to the cells of the tissues, and so weaken them as to give the microbes a better chance of success in the struggle between them and the organism into which they have entered. Though opinions may differ as to the exact mode in which the organism destroys intruding microbes, or intruding microbes destroy the organism, there is no doubt about the fact that a struggle does exist between them, and the recent experiments which have been made on such a large scale with Koch's tuberculin have shown that this fluid, although sometimes useful and productive of benefit to patients, not unfrequently has an opposite action, and appears to assist the development and growth of the tubercle bacilli present in the lungs or elsewhere. The apparently contradictory results obtained by the use of tuberculin seem to be explained by the observations of Brieger and Fraenkel in regard to diphtheria. These observers have discovered that the diphtheritic bacilli produce two substances, one of which is toxic to an animal and the other of which is protective. These substances differ in their power of resisting heat, the toxic substance being destroyed at a temperature of 55° C. to 60° C., while the other resists a temperature not much below the boiling point. These substances appear closely allied, and it is just possible that one may be transformable into the other. What their relationship to one another is we do not at present know, but if we look at the vegetable kingdom we find that in numerous instances poisons closely allied chemically to one another are present in the same plant, but have an antagonistic action to one another. Thus in Calabar bean we have physostigmine and calabarin, of which the latter stimulates and the former depresses the spinal cord; and jaborandi contains two alkaloids, pilocarpine and jaborine, having entirely different actions, and indeed jaborine antagonises the action of pilocarpine. Many alkaloids contained in the same plant seem to have a simple relation to one another; either the one contains the elements of water more or less than the other, or an atom of hydrogen in the one is replaced by an atom of methyl in the other. Whether some such simple relationship exists also in the product of bacteria we do not yet know, but there is little doubt that further researches will soon throw much light on the chemical nature of bacterial poisons. One noticeable point in regard to the resistance of animals to such poisons is that an abundance of glycogen in the liver increases its power to destroy the action of such poisons as pass through it. This power diminishes as the glycogen disappears, and what is true for the liver is probably true for other parts of the body. At any rate, we know that when animals are starved the glycogen disappears both from the liver and the tissues, and starvation greatly increases the liability of an animal to succumb to infection.

But putting aside the question of neutralisation of bacterial poisons by the lymph or tissues, it is evident that if the toxic products of any bacillus can be washed out of the organism, that organism will have a better chance; and experience confirms the theoretical view that free elimination, both by the kidneys and bowels, is useful treatment in infective diseases.

Turning again to the normal products of tissue change, we note that probably the most important part of a cell are its nitrogenous components or proteids. The chief products of nitrogenous waste are urea and uric acid, and these vary in relative quantity in different classes of animals. The urea forms the chief product of waste in the amphibia, but in the reptilia and in birds the waste appears almost entirely in the form of uric acid combined with bases. In man we have a mixed condition, as the waste occurs partly in the form of urea and partly in the form of uric acid, the proportion of acid to that of urea being about 1 to 33. It is usually supposed that there is a greater tendency in some persons to the formation of uric acid than in others, and that this tendency is associated with a gouty or rheumatic diathesis. In a number of exceedingly interesting and valuable papers, Dr. Haig has shown that the excretion of uric acid is greatly influenced by the comparative alkalinity[2] or acidity of the blood, and that the amount of acidity may be made to vary within very considerable limits by the kind of food, by the process of digestion, and by the use of various drugs. There are certain parts of the body in which the uric acid, wherever it may be generated, has a tendency to become stored up, and this is especially the case in the spleen and the joints, which may be regarded as dustbins for uric acid. Whenever the blood becomes more strongly alkaline than usual, it tends, like an active housemaid, to sweep up the uric-acid dust out of these bins, with the result of causing great discomfort to the organism generally; for the uric acid thus sent on its travels attacks the nerve centres and the vessels, producing headache and depression of spirits, so that gouty people will frequently object to the use of alkalies because, as they say, they are very lowering. Acids, on the contrary, prevent the blood from taking up the uric acid and lead to its being concentrated in the dustbins already referred to, so that they relieve the depression, remove the headache, but, at the same time, tend to cause pain in the joints and accumulation of uric acid in the spleen. Here it lies without producing any inconvenience for the time, but may possibly be stored up to such an extent as to cause great discomfort, or even danger, when this large dustbin comes to be cleared out.

A year or two ago I had a very striking case illustrative of Dr. Haig's view. A gentleman, who had suffered from chronic malaria, had an enormously enlarged spleen. That organ began to contract, and simultaneously the patient began to suffer from repeated attacks of renal colic, due to small uric-acid calculi, at intervals of two or three weeks. So frequent were these attacks that I thought he must have an accumulation of small stones in his kidney, for I did not fancy he could form the concretions sufficiently rapidly to cause such frequent recurrence of the renal colic. Post-mortem examination, however, showed that I was mistaken, for there was no calculus whatever in either kidney. Retention of uric acid in the spleen, according to Dr. Haig, is accompanied by its absence from the blood, and consequently by a feeling of well-being and jollity, which may, however, pass into an entirely opposite condition when the uric acid, which has been stored up during the period of retention, again finds its way into the circulation. Thus, while a glass or two of champagne, by increasing acidity, drives the uric acid out of the blood and consequently give rise to hilarity and happiness in the person who has taken it, it will give a gouty man twinges in his joints, by causing the uric acid to lodge in them, and may cause much subsequent headache and depression when its first stimulant effect has passed off and the imprisoned uric acid again enters the circulation. Even more serious consequences than depression and discomfort may, according to Dr. Haig, be produced by the rapid removal of uric acid from its chief dustbin or storage place—viz., the spleen—into the circulating blood; for, instead of only affecting the mental faculties, it may attack the heart, with fatal results. As an instance, he gives the death of the late Canon Liddon, who had recovered from an attack of gout in the head, and was feeling fairly well, even after the fatigue

[2] The blood is never acid, but diminished alkalinity may for the sake of convenience be spoken of as comparative acidity.

of a railway journey, but suddenly fainted shortly after breakfast, and died. Dr. Haig's explanation of this is that during the period of comparative well-being the uric acid had been stored up, and when the blood became more alkaline, as it does during digestion, and dissolved a part of it out, the liberated uric acid contracted the arterioles, thus raising the tension so that the heart was unable to overcome it, and causing fatal syncope.

Dr. Haig's theory of the storage of uric acid is that this substance is formed in the kidneys out of waste products derived from the nitrogenous tissues generally or from the liver. Part of it is at once excreted, but part of it may return from the kidneys, and either circulate in the blood or get stored up in the spleen. If we return to our analogy of the dust in the house, it is as if the ashes, crumbs, and waste vegetables were thrown together into an ash bucket to be emptied, but if this emptying were imperfectly done, the remnants would be thrown into a dustbin within the house, and could not be cleared directly to the outside, like the ash-bucket, but would require to be emptied by bringing the dust through the passages of the house, which would lead to much discomfort. The alkaline constituents of the blood are the natural solvents of uric acid, and anything that increases their proportion in the blood renders the uric acid more soluble, so that it is more readily removed from its place of storage and brought into the general circulation, where it produces manifold discomforts. Thus it is that alkaline remedies in gouty patients are so apt to give rise at once to the complaint of their being lowering, not because they have a depressant action of their own, but because they withdraw the uric acid from its lurking place and allow it to act upon the nervous system, thus producing depression. The alkalinity of the blood is increased when the materials of gastric juice are withdrawn from it during digestion, and at this time not only is the urine frequently neutral or alkaline, but the gouty man may suffer from the discomfort due to the circulating uric acid, and falls asleep over his paper after breakfast or feel stupid and drowsy after lunch, when he ought to be attending to his business. On the other hand, anything that diminishes the alkalinity of the blood, such as acids or wines, and condiments containing acid, nux vomica, opium, and iron, tends to drive the uric acid out of the blood into its store houses, and so produces a feeling of well-being which may, however, be only temporary and illusory, as the uric acid is not eliminated from the body but only stored away within it, and when the blood becomes alkaline after another meal, or after a dose of soda, all the uncomfortable feelings produced by uric acid may again torment the patient.

Again, returning to our illustration, if the contents of our dustbin were carried through our passages it would be flying about and great discomfort would ensue; but if we took care to wet each bucketful with a deodorising solution, there would be neither flying dust nor disagreeable smell, and the clearing out would be done with a minimum of trouble. In the gouty man's body salicylic acid seems to have a similar effect to wetting the dust; it accelerates the elimination of uric acid while preventing its disagreeable action, and Dr. Haig advises a prolonged course of this drug as a means of permanent cure in gouty patients. It is hard to say at present what the natural solvent of uric acid is in the body, for it is quite clear that people generally have not got salicylic acid regularly circulating in their blood. Sir William Roberts considers that the pigmentary substances which one finds in the urine probably have a solvent action, and it had occurred to me that possibly a body, pyrocatechin, which is almost constantly present in the urine, and is nearly related chemically to salicylic acid, may be one of the natural solvents, but I have not yet been able to test this idea experimentally.

I have entered thus fully into Dr. Haig's views of the pathology of gout and the elimination of uric acid because I regard his work as one of the most important contributions which have been made for many years to our knowledge of gout and rheumatism. I do not myself think we have yet got to the bottom of this question. In all probability we shall find that the proteid waste which yields the raw material for uric acid is quite as important, or more important, than the uric acid itself; but Dr. Haig has, at any rate, supplied us with a useful working hypothesis, which may enable us both to foretell the results of certain indiscretions in diet or regimen in gouty people, and to supply us with the means of alleviation or cure. Besides the salicylate of soda, upon which he lays so much stress, we find that gouty people are accustomed to trust to baths and watering-places of all sorts for relief; and no doubt a visit to Homburg, Aix-les-Bains, Carlsbad, Marienbad, Brides-les-Bains, Baden-Baden, Wiesbaden, Harrogate, Bath, or Strathpeffer will all greatly improve the health and often protect patients from gouty symptoms for many months or even years afterwards. In visiting all these watering-places one is struck by the diversity of the constituents of all these world-famed springs and the constancy of one ingredient—namely, water. In watching the patients one sees that people, who at home never touch a drop of water pure and simple from year's end to year's end, taking it only in the form of wine, beer, tea, or coffee, will at a spring drink tumbler after tumbler of water containing common salt with minute traces of other things, as at Wiesbaden or Baden-Baden, or the same constituent with rather more lime salts at Homburg, sulphate of soda and carbonate of soda at Carlsbad or Marienbad, or sulphurated hydrogen, as at Aix-les-Bains, Harrogate, or Strathpeffer. I do not mean to say that the saline or gaseous ingredients of these springs are without effect upon the organism—far from it, but at the same time I feel quite convinced that very many people would never require to go to watering-places if they would drink more water at home.

Water is the most universal solvent in the world. It is not only useful to wash out our closets and flush our drains, it has a similar effect in our bodies, and tends to wash away the waste products from the cells of which our organs are composed, to clear out the uric acid, urea, and phosphates through our kidneys, and thus prevent renal or vesical calculi, and also to wash out our liver and prevent gall-stones, while it helps to keep the bowels in action. The liver especially is an organ which suffers much from want of water, and I never see a gall-stone without asking the patient, "How much water do you drink?" Almost invariably the answer is, "I hardly ever touch water. I am not a thirsty person;" and on one occasion a lady called for a particular teacup, which held little more than a thimbleful, in order to show me how much she drank. On reckoning how much water she took in the twenty-four hours it came, as nearly as I could calculate, to sixteen fluid ounces. What wonder then that she had a gall stone! The poor liver had not a chance to make decently fluid bile, and naturally there was a deposit. By making such people drink a big tumbler of water, and especially hot water, every morning, with or without some Carlsbad salts added to it, and, if necessary, repeating the hot water once or twice more in the day, the renewed formation of gall-stones may frequently be averted, and symptoms of biliary colic, to say nothing of so-called "biliousness," may be prevented for many years, or perhaps entirely. But some patients will not do this at home, and if you were to tell a fashionable lady to get up at six o'clock in the morning and walk round Grosvenor-square with a tumbler of hot water in her hand, taking a sip at every three steps, to go on doing this for an hour together, and then to buy at a confectioner's a penny roll, and eat this without butter to her breakfast, with a small cup of coffee and nothing more, she would probably laugh in your face or apply to someone else for advice. But all this and more you secure by simply advising her to go to Carlsbad. There she finds everybody else doing the same thing, and instead of marching round and round all by herself, or accompanied only by little boys who might point the finger of scorn at her, she finds herself in the company of all the fashionable visitors to the bath, and marches to the music of a brass band. The company of others enables her to carry through the tiresome process and to comply with the troublesome restrictions, while the benefit she is sure to derive from it probably makes her feel so strong and happy that she swears by the place ever after, and returns to it again and again. For people who can afford it, a visit to such places supplies the best means of cure; but for those who cannot, an excellent substitute may be found in the daily consumption of hot water, if they will only have patience and perseverance in its use. The process of washing out is not only useful in biliary calculus, it is of the utmost value in preventing renal gravel and calculi. The process may be carried on at home by means of hot water either alone or with the addition of a small quantity of some saline, such as bicarbonate or nitrate of potash. In cases where the patient dislikes hot water alone, a slice of lemon thrown on the top of it gives it a slightly agreeable taste, and may overcome the patient's

repugnance. The two watering-places where patients with renal calculi chiefly go are Wildungen and Contrexéville, with its neighbours, Vittel and Martigny-les-Bains. What strikes one in the waters of these places is that in addition to other salts they contain a very minute trace of iron, which appears certainly to be beneficial to the patients. It is supposed to act by astringing the mucous membrane of the pelvis of the kidney, and so allowing calculi to slip down more easily.

There are several other methods of cure which I believe owe their virtues to the fact that they produce pretty complete elimination of waste products by causing the patient unconsciously to imbibe a large quantity of water. These methods are the grape cure, the whey cure, and the milk cure. For the grape cure the patient resorts to some warm, sunny place, where the grapes grow well, and there eats many pounds in the course of the day, while other articles of diet are correspondingly diminished. The ripe grapes contain an enormous proportion of water and very little solid matter, so that the grape cure really comes to be a combination of water drinking and semi-starvation, greatly resembling the Carlsbad cure, to which an additional likeness is given by the laxative effects of the alkaline tartrates contained in the grape juice. The whey cure is very much the same, with the exception that instead of eating grapes people drink whey, and that the climate where the cure is carried out is usually a high and bracing subalpine one, instead of being soft and sunny. The milk cure is one frequently used in this country with great advantage, more especially in cases of typhoid fever, in chronic diarrhœa occurring in persons who have come from tropical climates, in glycosuria, albuminuria, and some cases of heart disease. Its advantage in typhoid fever is so universally acknowledged that one need hardly say anything about it; but I think it is possible that its efficacy may not be due merely, as is usually supposed, to the milk supplying a bland and non-irritating diet, but may possibly be due also to the waste products of the organism being washed out by the large amount of water which is either contained in the milk itself or added in the form of lime-water or soda-water to it. The results of an exclusively milk diet in chronic diarrhœa are sometimes quite astonishing, and a few months ago I had a letter from a patient who had been suffering from it for ten years, had taken all sorts of medicine in vain, had just come back from Carlsbad worse than he went, and had nearly given up all hope of cure. I saw him only once, and told him that the medicine I gave him might do him good or might not, but that if he did not get well his only hope was to put himself on milk, and milk only. This treatment, as he informed me by letter months afterwards, cured him as if by a charm.

In diabetes, the milk cure requires to be used with care, and the cases for its use must be selected, for some patients may be injured by the insufficient nutriment which it affords, while others are greatly benefited by it. The cases in which it answers best are, I think, not those of pure diabetes, but rather those of gouty glycosuria, and more especially those in which glycosuria is attended by albuminuria, and where the low specific gravity of the urine, after fermentation, leads to a suspicion of contracted kidneys. In such cases, and also those of gouty kidney, where the urine is free from sugar and has a low specific gravity with a trace of albumen, a diet in which milk forms the chief or only ingredient tends to ward off spasmodic dyspnœa or the uræmic condition which so frequently occurs from imperfect elimination in old gouty cases.

But we must turn now to another channel of elimination—namely, the bowels,—and this channel is little, if at all, less important than the kidneys, and indeed, in the popular mind, it is more important. There is a great deal of truth in the two rules of long life, "Keep your mind easy and your bowels open;" and indeed, easiness of mind depends very much upon the state of the bowels. I remember reading many years ago a story relating to this subject, by Norman McLeod, in *Good Words*, but I have been unable to verify the reference. It was to the effect that a certain Lady Margaret sent a message down late one night to an old clergyman who lived in the manse not far from her castle to say that she was in great distress about her soul. "And how are Lady Margaret's bowels," asked the old gentleman. He learned the bowels were remiss in their duty. "Here are two pills," said the old man to the messenger; "let Lady Margaret take them to-night, and I will come and talk to her about her soul to-morrow morning." On going up next day the old man found that there was little for him to do, for the bowels had done their work and, as far as Lady Margaret's feelings went, had restored health to her soul as well as to her body. There is hardly a room in the house but will become dirtier if you cannot get your dustbin emptied, and there is hardly an organ in the body that does not suffer if the bowels become constipated. Not only the brain, but the heart, liver, lungs, stomach and kidneys have their functions impaired when the bowels cease to do their duty. Napoleon's disaster at the battle of Leipzig is popularly set down to his having eaten a bun in a hurry, and so brought on dyspepsia; but it would be a very curious page of history if we could learn how many wars, how much bloodshed, and how much cruelty, have had their origin in imperfect action of the bowels. Washington Irving, in his "Lives of the Caliphs," tells of a certain emir named Al Hejagi, who suffered for many years from dyspepsia and abdominal pains, and this wretched man distinguished himself, perhaps above all other rulers who have ever lived, in the enormous number of people whom he sentenced to imprisonment and death. He is said to have caused the death of no less than 120,000 persons, besides those who fell in battle, and to have left 50,000 in prison when he died himself. How much of all this misery might possibly have been averted by the judicious use of mild aperients, it is as impossible for anyone now to tell, as it is to estimate the debt of gratitude which Europe owes to the physician of Louis XIV. for the care he took of the bowels of that august monarch.

In mitral disease and in dropsy, either cardiac or renal, the benefit derived from the free use of compound jalap powder is very great, and in his work on "Purgative Medicines" Dr. Hamilton describes most forcibly the advantages he obtained from purgatives employed in such a way as merely to clear out the bowels, but not to produce violent purging, in typhus fever, scarlet fever, marasmus, chlorosis, hæmatemesis, hysteria, chorea, and tetanus. Like all good plans, that of purgation has been carried to great excesses, and its use has frequently degenerated into its abuse, so that it has fallen too much into neglect, and been replaced by the feeding-up system. This, too, is good in its way, but we must always remember that if we want a fire to burn brightly, we must not only pile on the coals, but also ply the poker to remove the ash. Neither the coals nor the poker alone will do—we must combine them, and neither the feeding-up system nor the purging system alone will do, but we must combine them in such measure as is necessary for the welfare of our patients. Now Nature has herself provided a certain regulating mechanism to attain this end, for, as my friend Dr. Cash has shown, each time that food enters the stomach, the bowels receive a certain impetus, which is sufficient in healthy people to carry the refuse out, and produce an evacuation once a day, the final impetus being usually given by the breakfast, which is sometimes followed by a cigar. In some people, however, the stimulus given by the food is not sufficient, and in these people it may be necessary to give a laxative daily. It is no doubt better to do without this, if possible, and by strict attention to regularity and soliciting nature at a regular hour every day, whether there be any desire to defecate or not, the bowels may at length become quite regular. Exercise in many cases is an adjunct, and the mechanical compression which the intestines undergo from the action of the abdominal walls stimulates them to increased contraction. More especially is this the case if the exercise be of the nature of climbing or riding, for in both of these the abdominal muscles contract with considerable power, while in an ordinary constitutional walk along the level road the bowels receive hardly any compression whatever. Where exercise cannot be obtained, abdominal massage, either by rubbing with the hand or by rolling a cannon ball covered with chamois leather over the abdomen, may be useful. A draught of cold or hot water in the morning or before going to bed at night, by supplying moisture to the contents of the intestines, may have the desired effect. The hard, indigestible residue of food-supply is a healthy mechanical stimulus to the bowels, and I think that in our efforts to save the stomach we sometimes disregard this need of the bowels and give food which is too soft, too mucilaginous, and too unirritating. Stewed prunes or stewed pears, by the indigestible cellulose which is present in them in the

forms of skins or gritty grains, figs either raw or stewed, raspberry or strawberry jam—by the indigestible seeds which they contain—and marmalade by its orange peel, as well as brown or bran bread by its indigestible husks, all supply a mechanical stimulus to the bowels. But even these sometimes fail, or we find that the stomach objects to them, although the bowels may need them, and we must have recourse to so-called aperients. Frequently when I prescribe a dinner pill, patients say to me, "But, doctor, it is not natural that I should take medicine every day." I say to that, "Quite true. Nor is it natural that you should keep a cook, and if your cook removes from your food everything that is stimulating to the intestines, you must take something to replace what your cook has taken away. If you will go back to the manners and customs of the ancient Britons, live in the green wood, and eat acorns and pig nuts, you will not want any dinner pills."

Now the dinner pill supplies a very useful stimulus, and I know a man who has taken one every day of his life for forty years, apparently with great benefit to himself. But there are some people who do not seem to thrive on dinner pills, and they either do not get any action at all or they get too much. In such cases, instead of giving the intestines one great push once a day by the dinner pill, one may give them a series of gentle jogs by adding to each meal a minute quantity of a purgative, and I find one-tenth of a grain of aloin, given with each meal, sometimes succeeds when other means fail, and even these small doses appear sometimes to be too much.

Now our bodies are like houses in more than one respect, and it is usually found that although each room may be dusted out once a day, there is a regular cleaning up with extra sweeping once a week, and, in addition to this, there is the spring and autumn cleaning of the whole house. Dinner pills and stimulating diet are like the ordinary daily dusting, and while they may answer for some persons, others find that, in addition, they require a weekly clear out; and if this be not given to them by means of a cholagogue purgative, they have a regular sweep out about once a month by getting a violent migraine with bilious vomiting, and generally they are obliged to fast for at least one day during the continuance of the headache. Besides this, our forefathers used to have a regular clearing out in the spring and autumn, not from the bowels, but from the blood-vessels directly, and they were accustomed, as they said, "to be let blood" in the spring and autumn. The effect of a cholagogue purgative, such as a mild mercurial—e.g., small doses of calomel, of blue pill, or of grey powder, followed by some saline—is sometimes very remarkable. I have seen a quarter of a grain of calomel with a seidlitz powder next morning change as naughty a little girl as you would not wish to see into a perfect little angel, and I well remember a little experience which I had some years ago at a friend's house. One morning at breakfast a little boy was very troublesome, and instead of taking his oatmeal porridge, as he ought to have done, he was nudging and bothering his little sister, who was sitting beside him. I said to my friend, "I think your boy's digestion is out of order." "Oh, no," he said, "it is only naughtiness"; but the naughtiness increased so much that the little boy had to be forcibly removed from the table. As soon as the expulsion was effected my friend said, "You are quite right. His breath does not smell right." In such cases as this I do not know any medicine that is better than some Gregory's powder, because it has both a moral effect and a physical action. Its nasty taste, when administered as a punishment, is wholesome morally, while its action upon the liver and digestion is most useful physically.

Not unfrequently adults suffer from nervous irritability, depression, weakness and inability to do anything, and this is put down on the part of their friends, and frequently of their doctors, to neurasthenia and hypochondriasis. They are treated with nervine tonics, nervine sedatives, change of scene, change of air, baths, waters, advice or scolding, and all to no good. Nervous and depressed they still remain. In some of these cases one may notice a large amount of mucus in the motions, and sometimes there appear to be actual casts of the intestine, long membranous looking shreds, apparently tubular in their nature. This condition has been described by the late Sir James Simpson under the name of "membranous enteritis," and it is not only usually said to be associated with hypochondriasis, but often it is looked upon as the consequence rather than the cause of the nervous condition, which is certainly its usual concomitant. But it is of no use here to treat the nerves. If you wish for any good result you must treat the bowels. In some, probably in many, cases it depends upon the partial constriction of the intestine near the junction of the sigmoid flexure with the rectum. The motions, lodging here, tend to cause an inflammatory condition of the mucous membrane, and profuse secretion of mucus, which either simply coats the fæcal masses or forms a kind of false membrane. This condition may be due to actual constriction of the lumen of the gut, or to a diminution in its calibre from pressure. In children prolapse of the rectum is a very common thing. In adults it is comparatively rare, but in them a tendency remains, not to prolapse of the rectum externally, but of the sigmoid flexure into the rectum, and this condition may give rise to great nervous disturbance, lasting for years, and perhaps indefinitely, unless its existence be suspected and the proper treatment adopted. One useful remedy, strongly recommended by Mr. Cripps, is the injection of from two to four ounces of cold water immediately after a motion. This is to be retained, and has, as he expresses it, the tonic effect of a cold bath upon the intestine, increasing the contractile power and lessening the tendency to prolapse. I once saw a case of this sort at intervals for two or three years without ever suspecting its nature. It occurred in a man from New Zealand, who had been accustomed to a great deal of horse exercise, frequently riding forty miles a day. He began to suffer from neurasthenia, hypochondriasis, loss of appetite, failing strength, and emaciation. In fact, he presented almost the typical aspect of the hysterical girls who are so well treated by the Weir-Mitchell plan, and, in consequence of this, I advised him to undergo a course of massage. This he did two or three times, with very little good, until by my advice he went to Dr. Eccles, who discovered the real cause of his illness, and by the judicious application of massage to the intestines completely restored him to health. But it is not only in the upper part of the intestine and in the sigmoid flexure that hindrances to elimination exist. Even when the fæcal masses have reached the rectum there may be difficulties in the way of their expulsion. It is usually imagined that nothing can be simpler than to empty the rectum, and yet one of the most grateful letters I ever had in my life from a patient was for giving instruction in this matter. As the poor lady said, she had for many years had great difficulty in emptying the bowels, and no one had ever taken the trouble to instruct her as to the mode of overcoming it. The fact is, one often forgets that the pressure of the abdominal muscles acts in the same direction in defecation as in parturition, tending to drive the fæcal mass towards the coccyx, and in order that it may be evacuated, its course must be finally directed somewhat forward. This change in direction is effected by the muscles of the pelvic floor, but if those are lax, as frequently occurs in persons of sedentary habits, and more especially in women who have had large families, the fæces, instead of being expelled, may accumulate in and distend the rectum. This accumulation is greatly favoured by the construction of waterclosets, as in sitting upon them the spine is usually at a right angle with the thighs, the legs are close together, and the pelvic floor is not put upon the stretch. When the body is inclined at an acute angle forward, the pelvic floor becomes tighter, and this is still more the case when the crouching or squatting attitude is adopted, which is naturally assumed when emptying the bowels in the open air. In cases where defecation is difficult this attitude is to be recommended, and a very low commode, pan, or chamber utensil should be used in place of the ordinary closet. Should this be insufficient, pressure with the hand close under the coccyx will tend to force the fæcal mass forward and to greatly facilitate its expulsion.

In relation to the complete evacuation of the bowels I have received a very interesting communication from my friend Dr. Batten. "Mr. R—— suffered from pruritus ani, with slight eczema and a small pile. On examining the rectum a small piece of fæces the size of a flat bean was found just inside the anal orifice, not only on one occasion, but whenever an examination was made. If the fæces were removed before going to bed (the pruritus occurred more at night) the irritation did not occur. Remembering your plan of treatment with administration of small doses of aloes I gave them, but without any success. On inquiry I found that Mr. R——'s bowels were moved with great regularity every morning, and that the motion was not a formed one—at all events not the last portion of it. Upon

this I reasoned that Mr. R——'s failure to entirely empty the bowel was due to the want of solidity of the motion not giving the bowel anything to contract upon. I therefore ordered him occasional doses of lime water, to be taken sufficiently often to cause a formed motion. The result was very satisfactory. The bowel contracted on and expelled the *solid* motion completely. I think, in our desire to keep the bowels regular, we overlook the disadvantages of fluid instead of a solid motion."

Before concluding this lecture, I will mention a plan which I have found of very great service either in cases of cardiac disease, in fevers, or in conditions of extreme weakness where the feebleness of the heart made it very advisable that the patient should use as little exertion as possible. It frequently happens that patients strongly object to use a bed-pan, and assert, sometimes with a considerable amount of truth, that they are unable to empty the bowels satisfactorily in the recumbent posture. A great deal of the risk connected with the use of a commode arises from the fact that when they use it they generally have to get out of bed and into it again. In these cases I adopt a plan, which I suppose many others have used also, but which I have never seen described. It is to have a strong platform made of rough wood, of such a height that the commode, when placed upon it, is level with the bed. A large, strong packing-box, sawn to the proper height, may answer, or, if this is not at hand, any carpenter can put together a rough but strong construction of the kind needed. If nothing else is at hand, the drawer of a wardrobe turned upside down will do, but it must be supported from below by books or pillows piled up within it, so as to prevent the bottom of it from breaking through, as usually it is not strong enough to support the weight. The commode being pushed close to the bedside, the patient has simply to slew himself round upon it. The body is raised, and the legs are allowed to hang down. After the bowels have been evacuated, he is rolled round on his side into bed. During the whole process no change is ever made in the level of the patient, the only alteration being in the relative position of the trunk and legs with reference to his pelvis. Perhaps some of the new devices for raising the patient bodily from the bed might be better than this, but generally they are not at hand, and the plan which I have mentioned can always be followed, as some kind of platform sufficiently strong to serve the purpose can be made with boards, boxes, or footstools in every house.

In this lecture I have not attempted to go over anything like the whole field which its title would cover, because I found this to be impossible in the course of the time at my disposal. I have therefore attempted to deal only with such points as have more of a practical than a theoretical interest. In concluding it, I thank you most sincerely, Mr. President and gentlemen, for the great honour you have done me in asking me to deliver this lecture, and to beg you to forgive the deficiencies in it, of which no one is more conscious than myself.

SOME CASES OF BONE ABSCESS.

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THE five cases which follow are examples of suppuration commencing in the interior of bones. In two it was necessary to let out the pus from the interior of the bone by an operation, and in three the pus had already partly escaped from the bone under or beyond the periosteum before operation was performed. They are interesting from the contrast which they present, one to the other, in their symptoms, from the difficulty in diagnosis and treatment, and because it is not often that we are able to compare a similar series. The amount of pain to which the presence of the pus gave rise varied in the individual cases; it was not dependent upon the size of the abscess, but upon the structure of the bone in which it commenced, and the ease or otherwise with which it was able to escape from the bone—in other words, on "the tension." For permission to treat and publish the notes of the cases which were in St. Thomas's Hospital I am indebted to Mr. Sydney Jones. I desire also to thank Mr. Barrow for permission to use the notes of the case which was admitted under his care at the Royal Free Hospital.

CASE 1. *Abscess of upper end of the tibia; operation; recovery.*—H. M——, aged fourteen, at school, was admitted into St. Thomas's Hospital June 6th, under the care of Mr. Sydney Jones, and discharged Aug. 1st, 1888. Three weeks before the patient got wet through. The following day the inner side of the right knee became painful. He went about for a week, but a fortnight before admission he was in bed suffering from severe pain in the leg, which prevented sleep. Between five and six years ago he says that he had an abscess on the bone in his right leg, which was operated on, some dead bone being removed. About two years afterwards an abscess recurred in the same situation, which was again operated on in the Shadwell Children's Hospital, some more dead bone being removed. The patient, a thin delicate-looking boy, complained of pain in his leg. There is a white scar six inches long over the upper half of the outer side of the right tibia, resulting from previous operation. Over the inner head of the same bone there is a hard, tender swelling measuring from three to four inches. Two inches below the patella on the right side the circumference is about two inches greater than at a corresponding point in the opposite limb. There are increased heat, great tenderness, and pain much worse at night. A Macintyre splint was applied and an ice-bag over the knee.—June 14th: The affected limb gives much pain at times, chiefly at night, the patient being very restless with it. Lead lotion was applied. Last night a morphia injection was given, but he slept only half an hour. He is frequently found to be crying with the pain.—*Operation:* On June 20th an incision about three inches long was made in the upper part of the leg on the inner side, another across the upper part of that, and the periosteum, which was much thickened, incised. On dividing this towards the inner side pus sprang into the wound, showing the excessive tension at which it had been kept. There was a large cavity which occupied most of the head of the tibia and was bounded with hard bone, the inner surface being filled in with dense fibrous tissue. To expose the cavity fully it was necessary to chisel away some bone. There was no granulation tissue in the cavity, which was washed out with chloride of zinc (40 gr. to 1 oz.) carbolic solution (1 in 40), and plugged with strips of lint soaked in carbolic oil. There was a good deal of pain at the earlier dressings, but on July 2nd the wound looked better and a fair amount of pus came away; the quantity was slight on the 11th, and the wound gradually closed, but on the 25th was reopened to some extent. Temperature on the 24th 99·6°. On the 26th only slight discharge was coming away and the wound was closed firmly by Aug. 1st.

The history of this patient is one not infrequent in bone abscess, there having been previous attacks of ostitis followed by necrosis. The suppuration was more acute than is usual in central abscess of bone, and the pain extremely severe, so that from want of sleep and inability to take food the boy was becoming pale, worn, and thin. It illustrates the effect of the tension of fluid confined in dense resisting structures in the production of pain, for although the wall of the abscess was not completely formed of bone, the fibrous tissue which completed the cavity was of such extreme thickness and density that, although it probably permitted of the somewhat unusual size of the abscess, it gave so slowly that the tension was very high. Of course in saying that the abscess was of somewhat unusual size for one which had not nearly reached the periosteum of the bone in which it began, I do not mean that it enters into the same category as the large expanded cavity mentioned by Stanley,[1] which contained over sixteen ounces of fluid, and which the patient emptied at regular times of the day by the removal of a plug of wood and tow, which blocked an opening into it.

CASE 2. *Circumscribed abscess of lower end of tibia; trephining; primary union; recovery.*—J. M——, aged sixteen, a tailor's apprentice, sent to me from Bedford, was admitted to the Royal Free Hospital on May 11th, 1889. His mother states that he had suffered from pain in the leg for from five to six years, and had hurt it three times: once a man trod on it, once it was struck by a hockey stick, and once an iron spike ran into it. He himself said that it had been worse since he knocked it against a tree about four years ago, two or three days after which it became very

[1] Illustrations of the Effects of Disease and Injury of the Bones, 1849.

painful, but there was no swelling of the limb or redness. During this time he has had attacks of pain at intervals of two or three weeks of a severe character, so that he has been unable to eat or sleep, but has stayed, crying, in bed, unable to bear the bedclothes to touch it. There has occasionally been pain between these attacks, worse in damp weather, but as a rule he is able to walk about without any inconvenience. About twelve months ago he first noticed the left ankle was larger than the right, and this swelling has increased slightly. The lower end of the left tibia was found enlarged from the tip of the malleolus upwards for a distance of one inch and a half to two inches. The surface is smooth, the skin over it normal in appearance, but hotter than elsewhere. Tenderness is complained of on deep firm pressure, especially on the anterior aspect. The circumference of the limb at the most prominent part of the internal malleolus is about three-eighths of an inch greater than on the right side. The tibiæ are equal in length and the movements of the ankle-joints equally free and painless.

As the symptoms were so very slight on admission it was decided to keep him quiet in bed and administer iodide of potassium and syrup of the iodide of iron, and apply tincture of iodine locally. The general temperature was normal, excepting during a short attack of tonsillitis, but the surface temperature over the swelling above the left ankle was found to be two degrees higher than over a corresponding point on the opposite limb. Sometimes this difference was more marked. May 31st: Right, 81°; left, 88·5°.—June 6th: Right, 84°; left, 89·5°.—7th: Right, 91°; left, 93·5°.—8th: Right, 82·5°; left, 88°. On the morning of June 3rd he awoke complaining of a jumping pain in the left ankle, shooting up the leg; it kept him awake for an hour. The ankle, increased about a quarter of an inch in circumference, became hot and tender, but there was no rise in the general temperature. On June 8th the limb was rendered bloodless in the usual way, and the area of operation again carefully washed with antiseptics. The position of the supposed abscess was marked on the skin. A longitudinal incision was then made behind the more prominent part of the swelling on the inner surface of the tibia, and another from the centre of this forwards. Flaps were raised, including the greatly thickened periosteum, the bone exposed, and the trephine applied. After sawing for a depth of nearly half an inch the removal of the circle of bone opened an abscess cavity, in which lay a quantity of pus surrounded with soft granulation tissue. The lower boundary of this extended to the epiphysial line; upwards a probe passed for some distance. The incision was prolonged upwards, more bone removed with a chisel, and the whole length of the cavity exposed fully. It was about two inches in length, was narrow, and bounded by hard, dense bone. It was scraped out with the sharp spoon, mopped out with chloride of zinc, forty grains to the ounce, and perchloride of mercury solution. The edges of the periosteum and skin were respectively brought together with catgut sutures. One small bloodvessel required twisting on removal of the Esmarch; the cavity was allowed to fill with blood-clot, perchloride dressings were applied, and the leg and ankle fixed with an anterior plaster-of-Paris splint. The temperature rose to 100·4° on the evening of the 9th, and there was some pain on the evenings of the 8th and 9th, but this did not recur, and the temperature was afterwards always normal. The first dressing was changed a fortnight after the operation, when the wound had closed excepting for a small granulating surface in the upper part about half an inch long. This soon healed, and he left the hospital on July 9th quite well. The surface temperature was taken before he went, and was a degree higher over the scar than on the other side. Microscopical examination of the granulation tissue removed from the cavity showed the ordinary structure of granulation tissue with some scattered nodules of closely packed cells surrounding a giant cell. No tubercle bacilli could be found. This boy has not had any attack of pain since he left the hospital, and is in good health.

This abscess presented the signs which we are accustomed to look for in chronic circumscribed abscess of bone, localised paroxysmal pain of long duration, marked tenderness and some enlargement of the area affected. Further, there was the increased local heat, as proved by the surface thermometer, quite independently of any general rise of temperature. So far as I have been able to discover, we have few, if any, accurate records of the actual differences of temperature which may be met with in chronic abscess of bone, and it is possible that in this there is a means of rendering a more accurate diagnosis possible between the various localised bone inflammations and circumscribed abscess. The mode of treatment of the abscess cavity after evacuation of its contents is an advance on that in which the drainage-tube is used. After the wound is closed, healing commences at once between the opposed soft structures, and the aseptic clot which fills the cavity commences to organise. Time is saved, for the tube may cause suppuration.[2] It would be out of place to discuss here the question whether Bloomfield or Brodie is entitled to credit for our instruction in the diagnosis and treatment of chronic abscess of bone, I would refer those interested in the question to Mr. Bryant's lectures on "Tension."[3]

CASE 3. *Small abscess in shaft of tibia.*—J. B——, aged twenty-two, a brushmaker, living at Chesham, was admitted to St. Thomas's Hospital May 17th, and discharged July 24th, 1886. His mother died from phthisis; six brothers and sisters died as infants. He had always been strong and healthy. Six years ago the man noticed a slight thickening over the upper part of the right tibia. This remained stationary, causing some pain at intervals, preventing work at times, until five months ago, when it began to increase in size and cause more pain, so that he was unable to work at all. Three months ago he noticed that the bone over the centre of the swelling was quite soft. There was no breaking of the skin. He had been in a country hospital, but nothing had been done. From there he was sent to a convalescent home. At the convalescent home he was unable to get about like other patients, but used to lie on the sofa all day, on account of the pain in his leg. This pain, of an aching character, had been worse at night time. On admission, he complained of a swelling over the upper third of the right tibia. At the centre of the swelling there was a circular depression to be felt in the tibia as large as half-a-crown, bounded by a sharp edge of bone. There was not much tenderness round this aperture. Limited fluctuation could be felt; skin somewhat discoloured over this. General health good. Evening temperature 99·6°.—May 20th: Under ether an incision was made into this swelling. A cavity in the bone was scraped out with a sharp spoon, the use of a chisel being required to open it up. The sinus ran into the medulla and terminated in a small deposit of granulation tissue surrounded by hard bone. Pus of a caseous character was found on incising the skin. The cavity gradually closed by granulation, and when the patient was heard of some months later he was in good health and able to work, having lost his pain.

Temperatures.

	23rd.	24th.	25th.	26th.	27th.
Morning	98·6°	98·6°	100·2°	98·8°	98·6°
Evening	99·0°	99·8°	100·0°	99·8°	—

Afterwards normal.

Circumscribed abscess of the shaft of the tibia is a much less frequent disease than abscess of the extremities of the bone. The mischief in this case was so limited that it was a subject of remark at the time of operation. For years the man had been unable to do his work on account of the attacks of pain in the bone, which compelled him to rest. There is a great resemblance between this case and one described by Hey of Leeds.[4] A young lady had a feverish attack, followed by severe pain in the shaft of the tibia. She came under his care six weeks later, and at the operation pus was found under the periosteum, bone was removed, and the cavity afterwards cleared out with a strong knife.

CASE 4. *Abscess in the lower end of the femur, producing effusion in the knee joint; operation; recovery.*—A boy, aged eleven, was admitted to Marsden ward of the Royal Free Hospital, under the care of Mr. Barrow, on July 31st, 1889, suffering from caries of the right os calcis of nine months' duration. He had always been a delicate child, and there was a strong history of phthisis on the father's side. Mr. Barrow operated for the disease of the os calcis on Aug. 9th, and the cavity was afterwards dressed so as to heal from the bottom. On the 30th the patient complained of pain in the left knee, and when closely questioned said that he had pain in it for the first time in June, and had had it on two or three occasions since; once it was so bad he could hardly walk. The pain of which he complained was dull and aching, but not severe. I found the knee enlarged, and

[2] J. Lloyd, Provincial Medical Journal, 1890, p. 198.
[3] THE LANCET, vol. i. 1888, p. 1285.
[4] Practical Observations in Surgery, third edition, London, 1814.

this enlargement was due to effusion in the joint, the measurement being half an inch more than that of the opposite side. There was tenderness on pressure just above the inner condyle, but this was not very marked. He was perspiring freely at night time, but was otherwise doing well. A back splint was applied to the limb and tincture of iodine to the joint. The temperature was rather higher at night about this time, and rose to 102·2° on the 10th of September. The effusion in the joint was now almost gone, but he complained of pain behind the knee when an attempt was made to fully extend the limb. On the 11th it was possible to feel thickening over both condyles, especially behind, with fulness in the popliteal space. These parts were also tender. A Macintyre splint with evaporating lotion was applied. Being in charge of the case at this time, it was my opinion that the boy had a tubercular centre in the popliteal space about the epiphysial line, and that the effusion in the knee joint was due to the spread of inflammation from that. It was decided to explore the popliteal space; for, although there was no fluctuation in the thickening to be felt there, the rise in temperature occurring at the time of the effusion in the knee, taken together with the increasing evidence of disease in the popliteal space, made it appear desirable to provide a way of escape for inflammatory products other than towards the knee-joint. The effusion had subsided, but measurement showed an inch larger on the left side on Sept. 18th, when an incision was made into the popliteal space from the inner side of the thigh just above the internal condyle. The incision was carried down to the bone, and a director pushed under the periosteum to the popliteal surface of the femur, when pus welled up by the side of it. The thickened periosteum was raised with the elevator from the popliteal surface, and the pus was found to be escaping from an opening at the line of the epiphysis about the centre of the space. A probe passed through this went into the condyles. The opening was enlarged, and access more readily obtained for the finger, by chiselling a groove in the lower end of the diaphysis of the femur. The finger was then passed into a large cavity in the condyles, which contained some pus and granulation tissue, which was scraped or washed away. This cavity was of very large size, appearing to be bounded only by the more compact tissue of the bone, and the forefinger in the condyles seemed to be separated from the thumb over the joint only by a thickness of tissues of about a quarter of an inch; a mere shell of bone appeared to remain. The whole was washed out with chloride of zinc (forty grains to the ounce), a drainage-tube inserted, the wound partly closed with sutures, and an anterior plaster splint applied to the front of the flexed limb over perchloride dressings. In the evening he complained of severe pain, and tincture of opium was given. On Oct. 30th Mr. Barrow scraped out the sinus in the os calcis again, and removed more tubercular material. On Nov. 8th the sinus above the left knee remaining from the drainage-tube had healed, and there had been no further effusion in the knee-joint. In consequence of the granulating cavity in the os calcis taking a long time to close he did not leave until Jan. 27th, 1890. The sinus above the knee remained closed, but during the year after he left reopened for a time. There has been no further trouble with the knee, and he is able to run about.

It is probable that the operation for this patient saved the limb, for had the contents of the abscess found their way into the knee-joint, nothing short of amputation would have been possible, the almost complete destruction of the interior of the articular end of the femur would have prevented the trial of conservative treatment. Abscess in the lower end of the femur is rare, but is sometimes met with when operation is performed for disease of the joint, and primary disease of the bones entering into this articulation is not uncommon. We can, however, rarely meet with the case at a stage sufficiently early to make operation on the bone likely to be of much use in arresting the disease of the joint. There has been considerable advance made during the last few years in the treatment of diseases of the articular ends of the long bones. It is recognised that occasionally better results are obtained by the performance of an operation which appears adequate to the removal of the disease, than in the completion of one of the set operations of the text-books. In no part of the body is this better exemplied than in the upper end of the femur. In the discussion at the Clinical Society on some cases brought forward by Mr. Symonds[5] this was fully exemplified. In a girl with suppuration in the hip-joint dependent on tubercular abscess of the neck of the femur, which had given way into the joint, I was able to scrape out the abscess cavity through the anterior incision, and obtain primary union. The operation took place more than eighteen months ago, and the joint continues perfect.[6] In Case 4 it did not seem advisable to attempt primary union, for there was a fear that if much exudation took place it would, if unable to escape externally, force its way into the knee, and so establish a communication between the joint and the large cavity, a complication not unlikely to render the operation useless.

CASE 5. *Abscess of the os calcis.*—It is not necessary to detail this case at any great length. The patient, A. B——, aged seventeen, was brought to me at the Royal Free Hospital on March 30th, 1889, with a large swelling of the left foot. This had been noticed for nine months, and had slowly increased, with absolutely no pain from the commencement. She knew of no cause. There was a large chronic abscess occupying the inner aspect of the posterior part of the os calcis, and extending from that for some distance along the inner border of the tendo Achillis. A curved incision into this gave exit to a quantity of cheesy pus, and on the surface of the bone was a circular opening about the size of a threepenny piece, with smooth rounded edges from which more caseous pus came. A gouge easily cut away the wall of a cavity, which was then found to be about the size of a chestnut, situated between the epiphysis and the body of the bone. A small caseous sequestrum, about the size of a hazel nut, was lying loose in the cavity. This was removed, the cavity scraped out with a sharp spoon, washed out with chloride of zinc and with perchloride solution, silk stitches were passed, the cavity plugged with strips of gauze which had been dipped in iodoform and glycerine emulsion, lint and wool applied, and a plaster splint to keep the foot still. About thirty-six hours after the operation, the plugs were removed, the stitches tied, and a tube inserted. The wound slowly filled up, and the patient left on April 26th. There was still some œdema of the scar, but no pain. She returned in the following July with some pain in the foot, but it subsided under treatment, and until a month ago she did not present herself again, having been able to do her work as a servant; she then came with pain below the inner malleolus, rather worse at night; the signs were not, however, very definite, and quickly subsided under treatment. The unusual thing about this case was the complete absence of pain, although much of the os calcis was destroyed and the place of the bone taken by pus and caseating products. The only evidence of disease of the bone before operation was the widening of the bone, which was apparent in comparing the two sides. The process was a tubercular one, and the formation of the abscess took place in a part composed of cancellous bone tissue.

Harley-street, W.

CAN INJURY PRODUCE LOBAR PNEUMONIA?

BY JOHN A. MACDOUGALL, M.D., F.R.C.S.E.,
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THERE is, perhaps, no disease which has a more broadly written etiology than pneumonia, and certainly none whose probable causation has so widened and grown with advance in the science of medicine. Certain causes there are which, so far as clinical observation can guide us, stand as fairly well determined; but there are others to which doubt still attaches, and regarding which widely different opinions have been expressed. The number of surgeons is small, judging from contemporary literature, who have any doubt as to the direct relationship which injury bears to pneumonia, and some physicians of high standing appear to hold a similar opinion; but there are others, likewise men of light and leading, whose strong belief is that injury to the chest cannot produce lobar pneumonia. In illustration of this present position I quote the opinion of two writers who may justly be regarded as reliable exponents of surgical and medical

[5] THE LANCET, vol. i. 1891, p. 1102.
[6] Ibid., vol. ii. 1890, p. 820.

beliefs. Mr. Erichsen[1] writes: "Pneumonia is an invariable sequence of wound of the lung, and constitutes one of the great secondary dangers of this injury; the inflammation necessary for the repair of the wound in the organ having frequently a tendency to extend to some distance around the part injured, and, not uncommonly, to terminate in abscess. Traumatic pneumonia resembles in all its symptoms, auscultatory as well as general, the idiopathic form of the disease. ..... It differs, however, from the idiopathic form in having less tendency to diffuse itself throughout the lung, and in being limited to the neighbourhood of the part and to the side that is injured. ..... Traumatic pneumonia is also usually more sthenic than that which arises from constitutional causes, and is attended by more acute and active febrile disturbance." While the late Dr. Hilton Fagge[2] states his opinion thus: "True pneumonia is not set up by local injuries of the chest, wounds of the lung, foreign bodies in bronchi, or any other cause. Traumatic inflammation of the pulmonary tissue is chronic and interstitial, or it may be acute and caseous, but it is not hepatisation. ..... It is impossible to induce the affection experimentally in animals." Widely different opinions these, and yet each is the unquestioned judgment of a master of his art. What, then, is the explanation of this difference? Is it that the surgeon sees with other eyes and hears with other ears than those of the physician, or is it that the local pulmonary manifestation marks different morbid conditions? As it has happened to me to have seen and to have notes of a considerable number of chest injuries, followed by secondary harm, and as I possess, in common with the majority of men whose retrospect of active work is a somewhat lengthened one, a fair knowledge of the clinical history and aspects of lobar pneumonia, it has occurred to me that the consideration of a selected and short record of some of those traumatisms and the forms of their sequelæ may, perchance, throw some little light on an important but vexed question. Our field of inquiry must, however, extend beyond that of wounds of the lung, because pneumonia is believed to supervene on contusions of the chest walls, or upon violent strains, unattended, so far as can be judged, by any gross injury to the pulmonary tissue. With a view to the consideration of these various forms of injury, it may be well to arrange the notes under three heads:—1. Contusion of chest wall without injury to the lung. 2. Contusions, with pulmonary laceration. 3. Penetrating wounds involving lung structure.

CASE 1. *Contusion of chest wall without injury to the lung.*—J. J——, a workman in middle life, while employed upon a somewhat high scaffolding, fell, and, falling, pitched upon his left side. Seen within a short time of his injury, he was found to have a large ecchymosis over the left thorax, but there was no crepitation or other evidence of fractured ribs. He had a good deal of dyspnœa and pain, with imperfect respiratory movement on the injured side, and he was said to have expectorated some blood immediately after his fall. On the following day he was still suffering much pain over the left chest; this was now, however, moving with greater freedom and with distinct increase in the respiratory sounds. The dyspnœa, too, was much less, and the right lung presented on careful examination, beyond exaggerated respiratory murmur, no abnormality. In the evening his temperature rose somewhat suddenly to 103°, and the next morning there was discovered at the *right* base a patch of crepitating râles, with slight dulness on percussion, and there was present some rusty sputum and slight increase in the dyspnœa. Morning temperature 103°, evening 104°; pulse 100 to 110; respiration 30. This pneumonia ran a normal course and terminated on the fifth day, but the dulness over the involved area was never pronounced or the respiratory bruit very loud. There was little expectoration, and the consolidation was never extensive. Eight days after his accident all symptoms had disappeared, and the lung was in process of resolution.

CASE 2. *Contusions, with pulmonary laceration.*—A. H——, a strong, muscular man, had the wheel of a heavily loaded cart "backed" across his right chest. Five at least of his ribs were fractured, the third included. He had considerable emphysema, some pneumothorax, pretty profuse hæmoptysis, and painful dyspnœa. This latter symptom passed away considerably, and for twenty-four hours he did well. When visited on the following morning he was found to be very feverish (temperature 103°), with a hard and full pulse, to be worried by an incessant short cough, and to be breathing with great difficulty. That a good deal of this was "felt" dyspnœa was evident. It was impossible to examine satisfactorily the anterior part of the chest, but behind, over a wide area—over, indeed, the whole upper and middle lobes—there was found very decided dulness on percussion, with harsh respiration and bronchial râles. Owing, perhaps, to the short jerky nature of his breathing no sub-crepitation was audible. He was bled very freely from the arm, with great and immediate relief. That evening his temperature had fallen two degrees; on the following morning it was still lower, and in little more than twenty-four hours from the venesection it had become normal. For two or three days afterwards there remained evidence of a certain degree of consolidation of the lung, but it was certainly not that attendant upon true hepatisation.

CASE 3. *Contusions, with pulmonary laceration.*—An athletic, vigorous man of thirty-two was, in a destructive railway collision in which several lives were lost, thrown with much violence against a wooden projection, which caught him under the angle of the scapula on the left side. He was for a time profoundly collapsed; had great dyspnœa and intense pain in the region of the injury. Examination gave no evidence of fractured ribs, but over the tender area the percussion note was dull. The left lung moved languidly in respiration, and the breath sounds were feebler than those on the right. When he rallied he began to expectorate fresh frothy blood, and this expectoration, growing gradually darker, continued for nearly a week. For many hours he was in imminent peril of his life from threatened asphyxia—a condition which was in a measure brought about by feeble and inefficient cardiac action. When this condition was overcome and his chest examined, it was found to be clear for full two inches at the base and over the whole upper third. Between these two points, over the area of injury, there was nearly complete dulness on percussion, with absence of breath sounds. It was believed that he had a pulmonary apoplexy, the probable result of a rupture of the lung. His temperature three days after the accident began to rise gradually, until on the sixth day it had reached 103°. The local condition was now dulness over the whole middle and lower lobes, tubular breathing with much bronchial rhonchus, and the constant expectoration of dark, shreddy clots. On the eighth day the temperature began to fall, but did not become afebrile for nearly a week, during which time the dulness was very slowly clearing, while the bronchial râles and coarse crepitation disappeared. He made, however, a slow and tedious recovery, and, at the end of nearly three months from the date of his injury, it was thought by some who examined him—and these were well able to judge—that there existed distinct evidence of interstitial changes, probably cicatricial, in the left middle third.

CASE 4. *Penetrating wounds involving lung structure.*—J. H——, aged fifty, a man in vigorous health, stabbed in a quarrel, was admitted into the Cumberland Infirmary under my care. He was suffering from considerable shock, and presented an incised wound nearly three inches long in the sixth left intercostal space, just in front of the angle of the ribs. There was free hæmorrhage, the source of which was an incision in the lung. This incision could be easily seen, as the organ rose and fell in respiration. There was a certain amount of pneumothorax and some dulness at the base, due doubtless to blood in the pleura. The wound was dressed with a thin antiseptic veil; he was turned well over on the wounded side to favour drainage, and means were taken to preserve, if possible, a low condition of vascular tension. Twenty-four hours afterwards, when the bleeding had ceased, the wound was closed. On the following day he had pain in the side, a little rise in temperature (100°), some rusty expectoration, and râles, audible in the larger bronchi, in the lower lateral area of the left lung. All these signs pointing, as I believe they did, to some pneumonic condition in the immediate neighbourhood of the pulmonary wound, passed away in three days, and when he was dismissed from hospital, three weeks after his admission, the chest condition was quite normal.

(To be concluded.)

[1] Science and Art of Surgery, seventh edition, vol. i., p. 627.
[2] Principles and Practice of Medicine, second edition, vol. ii., p. 142.

CASES OF INTESTINAL OBSTRUCTION TREATED BY LAPAROTOMY.[1]

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CASE 1. *Intestinal obstruction; adhesions around the vermiform appendix; laparotomy, with removal of appendix and liberation of cæcum; recovery.*—Mr. G——, aged thirty, seen with Dr. Rhodes on Feb. 20th, 1889. The patient had been ill for two days, suffering from pain referred to the cæcal region, vomiting, some abdominal distension, and no action of the bowels. A history of an acute attack of peritonitis thirteen years previously was obtained. Since then, with the exception of milder attacks of pain on several occasions, he has been in the enjoyment of good health, and is a very active athlete. For several months prior to the present illness he had been troubled with constipation, with an increasing difficulty in obtaining an action of the bowels. Has occasionally had colicky pains over the cæcum. The usual treatment was resorted to—enemata, rectal feeding, and opium to relieve the pain. Some relief was obtained by washing out the stomach. The symptoms of obstruction, however, continued, and assumed a more aggravated form. Stercoraceous vomiting appeared about the tenth day. Laparotomy was performed on March 2nd, the thirteenth day from the beginning of the attack. Incision made in the right linea semilunaris. Directly the abdomen was opened extensive firm adhesions, due no doubt to the old attack of peritonitis, were found in the cæcal region. The ileum was attached to the cæcum, and the latter fixed down firmly. The appendix vermiformis was jammed down in the pelvis, where it was held by strong bands. These were separated, the appendix brought up into the wound, a ligature placed round it near the cæcum, and some three inches of it removed; its lumen being completely obliterated, no special precautions were taken to turn and stitch its peritoneal covering. After careful cleansing the abdomen was closed. The after-history of this case is very simple. The bowels acted freely the same day some eight hours after the operation. The symptoms of obstruction were immediately and completely relieved, and the wound gave no trouble. Now, after the lapse of twenty-one months, Mr. G—— expresses himself as being in the enjoyment of excellent health. He has resumed his athletic exercises, and is able to ride a bicycle with ease and comfort. He is careful with his eating and drinking, and although his bowels are still somewhat sluggish, a regular daily action is generally secured.

CASE 2. *Intestinal obstruction; knuckle of intestine found adherent to the mouth of an old femoral hernia; laparotomy; recovery.*—Elizabeth G——, aged fifty-five, was admitted to the infirmary on July 25th, 1890. For three months she has occasionally had attacks of vomiting, accompanied with severe pains in the abdomen. The attacks have come on very suddenly, usually lasting about half an hour. The last attack commenced a week prior to her admission, with severe pain in the lower part of the abdomen. Vomiting set in almost at once, and became stercoraceous six days later, the day before she entered the infirmary. Constipation was absolute, but there never was complete obstruction, as flatus was passed up to the time of operation. Her condition when admitted was very serious; the eyes were sunken, and the vomiting was almost incessant; her state reminded one very forcibly of a patient suffering from strangulated hernia. At this time she was on the medical side, where belladonna was freely administered, and the vomiting checked for eighteen hours. Enemata were also given, bringing away some scybala. When seen a few days after admission, her state was most critical; the abdomen was very distended, and everywhere tympanitic. A swelling the size of a walnut was discovered in the right femoral region. This the patient stated had existed for years, and caused no inconvenience. It was dull on percussion, and gave no impulse on coughing. It was thought that possibly a piece of bowel had become strangulated at the upper part of the femoral canal; but as the local symptoms referable to this region were so indistinct, it was thought advisable to open the abdomen in the median line. This was done while the patient was under the influence of chloroform. As soon as the abdominal cavity was opened the fingers were introduced and passed down in the direction of the right femoral region. Here a small knuckle of small intestine was readily found adherent in about half its circumference. The adhesions were carefully separated, and the portion of gut so detached brought up into the wound and examined. There was some oozing from the surface which had been attached; otherwise it was healthy, so it was returned, and the wound in the abdominal wall completely closed, the peritoneum being separately sutured with catgut. The wound was dressed with carbolic gauze and wood wool pads. About three hours after the operation the patient passed a very copious motion. At first alimentation was effected by the rectum, fluid food being administered by the mouth on the third day. The wound was not dressed for a week, when it was found practically healed. Twenty-five days after the operation she left the infirmary, wearing a truss and an abdominal belt.

CASE 3. *Intestinal obstruction; laparotomy; death.*—J. W——, aged thirty-eight, seen in consultation with Dr. Edward of Rawtenstall and Dr. Stewart of Bacup on April 23rd, 1890. The following history was obtained. The patient has suffered for years from a right oblique inguinal hernia, and has worn a truss. The rupture has not been down for a long time, and never when he has the truss on. On April 17th he felt great uneasiness in the right inguinal region, which became worse towards evening, when he was sick once or twice. He retired to bed early, but had to get up again, owing to the increasing discomfort. After being up and moving about for an hour or so, he went to bed again, but felt very uneasy all night. The next day he remained the same, employed some domestic remedies, but obtained no relief. Sickness now became persistent, and remained so until the end; it was attended with distressing and almost constant hiccough. Enemata, repeatedly tried, brought little or no fæcal matter away. A couple of pints of fluid could be easily thrown up. When I saw him he was lying propped up in bed, and had the facial expression of one suffering from obstruction. Tongue dry in centre; pulse 90, small and inclined to be thready; no fever. He was violently sick while he was being examined. Abdomen pretty uniformly distended and everywhere resonant; no tenderness, not even in the vicinity of the hernial sac, which was empty, and the finger could be easily passed up the inguinal canal. Diagnosis: Intestinal obstruction, probably connected with the old hernia, possibly adhesions about the neck. The condition of the patient was most unfavourable, still we deemed it our duty to give him the only possible chance by immediate operation. Abdominal section was therefore performed by a median incision. On opening the abdomen distended small intestine protruded, and on passing the left forefinger towards the right inguinal region some coils were found heaped up. On examining more carefully an opening was found, the anterior edge of which was exceedingly sharp, and attached to it was a loop of small intestine. The opening corresponded with the internal ring, and we concluded that the gut had become strangulated immediately on its entrance into the canal. I attempted to pull up the coil of intestine, but feared to use much force lest the bowel should give way. Any attempt to divide the stricture from the inside would be too hazardous, so I decided to cut down on the sac. This was not an easy matter, as it was empty, and the light very indifferent. However, I succeeded in opening it, and found that it contained a very small quantity of clear serum. Now, by fixing the internal ring and dilating it somewhat with the finger in the abdominal cavity, and pressing the coil with the fingers in the sac, I reduced it after a considerable amount of trouble. The internal ring was so movable that it, together with the knuckle of intestine strangulated within it, could be pulled up a considerable distance into the abdominal cavity. After reducing the gut it was examined, and found to be deeply congested, but free from any deposit of lymph. The sac was isolated from the neighbouring structures, transfixed with carbolised silk, tied in a Staffordshire knot, and the portion below the ligature removed. This wound was cleaned with a perchloride solution, dusted over with boracic powder, and closed entirely with a continuous silk suture. The abdominal wound was also closed with four silk sutures passed through skin and parietal peritoneum on each side, and three superficial silk sutures. Unfortunately, the shock of

[1] A communication made to the Clinical Society of Manchester on Dec. 16th, 1890.

the operation proved too much for the patient in his then exhausted condition; he was very collapsed, and did not respond to the medicaments employed. He died about three hours afterwards.

(To be concluded.)

FIBROID PNEUMONIA.

BY A. G. AULD, M.D.

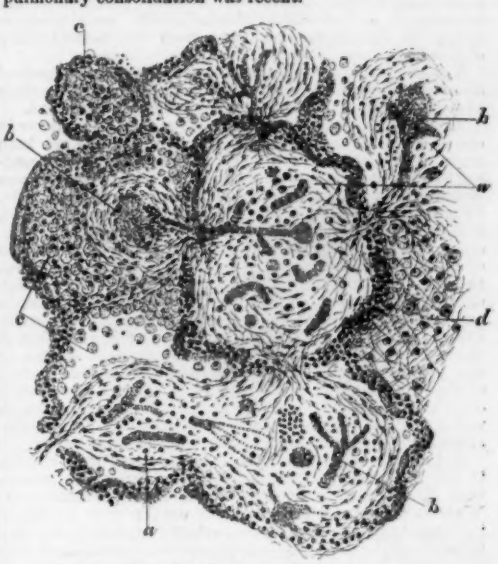
(Concluded from page 1310.)

I NOW submit the following cases of primary fibroid pneumonia, the clinical notes of which I have obtained through the kindness of Drs. Finlayson and Coats, under whose care they respectively were.

CASE 1.[1]—Alex. C——, aged forty, grocer, enjoyed good health till three weeks before admission to Glasgow Western Infirmary. Illness began with a chill, which gradually became worse, with cough and expectoration. Examination revealed signs of consolidation at the right apex and râles at the bases of both lungs. Morning temperature 101·2°; evening, 103°; falling to 101° on the evening of the third day. After the fifth day it fell to 99·4° in the morning and 100° in the evening, and averaged this rate till death. Respiration 26; pulse 120. After a few days there were signs of extensive consolidation in both lungs. The expectoration was greenish-yellow and considerably abundant; the urine was free from albumen. The diagnosis was acute phthisis. The patient died three weeks after admission, making in all six weeks in which the disease ran its course. Dr. Coats conducted the post-mortem examination. It was therein found that both lungs in their lower two-thirds were consolidated. The consolidation was generally red, and somewhat resembled ordinary hepatisation, the cut surface being granular, but the lower lobe of the left lung was smooth on section and of a slate-grey tint, and this lung was somewhat shrunken. The right lung was of normal bulk. Both apices were crepitant. The bronchi were throughout filled with thick yellow pus, and in the lower part of the left lung were generally somewhat dilated; elsewhere of normal calibre. Not a single tubercle was anywhere to be found. The other organs were normal. After hardening pieces from all parts of both lungs in Müller's fluid, and afterwards in alcohol, I mounted and examined forty sections. The left base contained areas of dense connective tissue, formed by the fusion of intra-alveolar masses with the fibrous walls of the alveoli. The remaining condensation in both lungs had the following characters. In some areas the alveoli were filled with fibrin and large epithelial cells. Occasionally the fibrin was replaced by a gelatinous exudation like frogs' spawn. Encroaching on these areas, and occupying much the greater extent of the consolidated parts, was the characteristic induration of the intra-alveolar products—globular pedunculated masses of fibrous tissue, very vascular, and showing frequent extravasations (see illustration). The alveolar walls were also somewhat thickened by the nuclear growth. White and red blood cells and proliferated epithelium in exceeding abundance occupied such space of the alveoli as was unoccupied by the fibrous tissue, and side by side with the tissue-containing alveoli were not a few which were exclusively occupied by the former products. Neither the pleura nor interlobular septa showed any thickening, but the sheaths of the smaller bloodvessels and bronchioles participated in the new growth. The bronchial mucous membrane was crammed with lymph cells and its surface stripped of its epithelial layer, but at rare intervals a few ciliated columnar cells derived from this source were to be found in an alveolar cavity. A drop of the bronchial pus was examined by Dr. R. Buchanan and found to contain the capsulated diplococcus pneumoniæ of Fränkel. Both the muscular and inner coats of the pulmonary artery were thickened.

CASE 2.—John M——, aged sixty-three, shoemaker, began to suffer six months before admission to hospital from a cough and difficulty of breathing and swelling of the feet and legs. He had been asthmatic for some years. Three weeks ago the chest symptoms got so bad that he was forced to remain in bed. He was emaciated and sallow; temperature normal, and occasionally subnormal; pulse 98; respiration 32. Cough slight, and attended by little or no expectoration. Mucous râles in both lungs. Great dyspnœa, which amounted at times to orthopnœa. Death took place two days after admission. Post-mortem examination: The left lung was adherent at the extreme apex. It was highly œdematous throughout, with partial condensation, while at the extreme apex and beneath the adhesions there was a darkly pigmented cicatrix, with cretaceous matter in the midst. The right lung was more extensively adherent; it also contained cicatrices with cretaceous matter, and a small ragged cavity. There was no appearance of active or recent tubercular condensation. Otherwise this lung was œdematous and partly condensed. The heart was found to be considerably enlarged, and the muscular walls at the extreme apex of both ventricles were very thin. There was extensive atheromatous disease of the arteries. The kidneys were granular, and the surface of the liver highly granular. The condensation of the lungs was chiefly of the lower lobes. It was red on section and slightly granular, and had not caused any shrinking; there was no bronchiectasis. Microscopically, it presented features in every respect similar to those described in the first case. The fibrous masses in the alveoli, however, were herein more dense and homogeneous, resembling the sclerosed glomeruli of contracted kidney. Large swollen epithelial cells, often bi-nucleated, were in considerable abundance. Many of the alveoli also contained a fibrino-hæmorrhagic exudation. Their walls could hardly be said to be at all thickened, and the septa were in a like condition. The bronchial mucous membrane was perfectly normal, but some columnar epithelium was in this case also to be found in a few of the air-cells, although it is just possible that this was brought about in the cutting of the sections. A very marked feature, and one of considerable interest from another point of view, was the extreme atrophy of the muscular coat of the bronchial and pulmonary arteries. Sometimes the muscle existed only as a series of dots along the walls of the smaller vessels, in the midst of the fibroid tissue, and was well brought out in mahogany-red by picro-carmine in a light-pink ground.[2]

The first of these cases is very striking, and in some respects unique. The second was associated with fibroid changes in other organs; it is evident, however, that the pulmonary consolidation was recent.



FIBROID PNEUMONIA.

a, Masses of connective tissue developed within the alveoli; in some places fusion with the alveolar walls has taken place. *b*, Bloodvessels of the new tissue; in two alveoli considerable extravasation is seen. *c*, Desquamated and fatty epithelium mingled with some leucocytes and red blood-cells. *d*, Alveolus filled with a fibrinous exudation. × 120, considerably reduced.

[1] Only a brief summary on the clinical side can be given here.

[2] This phenomenon conclusively shows that the observations of Gull and Sutton on the muscular coat of the arteries in Bright's disease were in some cases, at any rate, perfectly correct; but which some have been unwilling to concede.

From the consideration of these two cases, together with the indications afforded by those previously mentioned, it is plain—(1) that there is pneumonic lobar affection of the lungs, insidious in its origin, and subacute or chronic in its course, characterised essentially by induration of a creeping fibrinous exudation, and by interstitial changes, and accompanied by proliferation and fatty degeneration of the alveolar epithelium, and also not unusually of the bronchial epithelium; (2) that anatomically the disease is in every respect identical with chronic pneumonia succeeding an acute attack (see my previous paper for the histological appearances of the latter[3]); and (3) that the morbid anatomy of the disease has in its earlier stage such distinctive and unequivocal features as to give the affection an assured position, and to permanently exclude the possibility of confounding it with any other chronic affection of the lungs. Inasmuch as this disease—whether preceded by an acute pneumonia or being chronic from the first—has as its leading feature the development of a nuclear fibrous tissue in, with, and about a pneumonic exudation, it is most fitly termed "fibroid pneumonia."

An excellent comparison can be drawn between this affection and parenchymatous nephritis. It is well recognised that the latter disease—often termed "large white kidney"—may succeed to an acute nephritis, or may be chronic and insidious from the beginning. In it, likewise, there is found, in whichever way arising, both interstitial fibrous growth and desquamated fatty epithelium. Nay, the comparison may be drawn yet closer. There can be no question that the capillaries of the glomerular tuft bear to the glomerular cavity a relationship almost identically similar to that which the pulmonary capillaries bear to the alveolar cavities; and, further, it is remarkable that the epithelial lining of both capsule and tuft, but especially of the former, approximates in character very closely to the pulmonary epithelium. Now, when acute nephritis has lasted for some time, when it has become subacute or chronic (and this is by no means confined to scarlatinal cases), a great many of the glomerular cavities are filled by a new growth of connective tissue. With Cornil I hold this as certain, notwithstanding the opposition of Ziegler and others. Further, I have obtained good evidence that in some cases at least this fibrous tissue is produced by the invasion of a fibrinous exudation in the periglomerular space, by fibroblasts proceeding from the intercapillary connective tissue.

Not only in minute anatomy, but likewise in respect of duration, the comparison holds, some cases running their course quickly, others remaining chronic for a long time.

Again, the kidney supplies us with a complete answer to one of the most formidable objections which has yet been urged against the possibility of a fibroid pneumonia succeeding to an acute. It is well known that there are many cases of acute pneumonia in which after the crisis or pseudo-crisis, dulness, deficient breathing, and râles persist for months, and yet the lung ultimately recovers itself. Wagner[4] especially lays stress on this as distinguishing the chronic issue of a genuine pneumonia, in opposition to induration. But the same thing is found in connexion with acute parenchymatous nephritis. It is common to have albuminuria and dropsy persisting more or less for months after an acute attack, with ultimate recovery. In this case, as in that of the lung, the morbid condition must be regarded as due to the persistence of *epithelial*, as apart from interstitial, changes; in fact, in pulmonary cases of this sort I have observed post mortem abundant proliferated epithelium in the alveoli, the walls of which were lined by spindle-shaped epithelial cells, containing two and three nuclei.

Judging from what I have seen and read, it is chiefly, if not exclusively, when resulting from an acute attack, that fibroid pneumonia may assume a very chronic form. When it commences subacutely, it usually runs its course in about six weeks. Herein lies its chief diagnostic distinction from chronic broncho-pneumonia, which is invariably of long duration. But anatomically there is herein a danger to be specially guarded against. In cases of chronic broncho-pneumonia with thickened septa and alveolar walls it occasionally happens that towards the termination of the disease parts of the lung break down, and circumscribed areas surrounding such ulcerations become the seat of an acute fibrinous exudation, which quickly undergoes fibrous changes. Hence, if a limited microscopical examination were made, it might be concluded that the case was one of fibroid pneumonia. I have reason to believe that Heitler has fallen into this error with respect to one or two of his cases, and a case of Talma's seems to have these features; true primary fibroid pneumonia is invariably lobar. Again, there is a pneumonic condition of the lungs, usually circumscribed in extent, which may arise under special circumstances, and which may undergo the fibroid change. I allude to that destructive form of pneumonia described by Sir William Gull and others,[5] which succeeds to compression of the structures at the root of the lung, causing congestion and the insufflation of bronchial products from the bronchial paralysis. It corresponds to the "foreign-body pneumonia" of Friedlander. In these circumstances the lung undergoes a destructive pneumonic consolidation. This may arise in another way, by the contents of a gangrenous cavity which communicates with a bronchus being sucked into the lung. In a case of this sort which lately came under observation spots of intense broncho-pneumonia were seen scattered throughout the lungs, resembling tubercular consolidations. Microscopically, the central area of such lobules was reduced to an abscess, surrounding which was a dense exudation, partly purulent and partly fibrinous, and at many points new fibrous tissue was growing in the alveolar walls and throughout the fibrinous exudation. That the fibroid induration may overtake such cases as Sir W. Gull describes is rendered probable by the above case, as also by that of Dr. Saundby, formerly alluded to.

Lastly, as this disease has been adequately established from the standpoint of pathological histology, it remains that it receive due clinical recognition. The chief obstacles to this are its rarity and the similitude in general of its physical signs and symptoms to those of phthisis. There are, however, already not a few indications, both positive and negative, on which a diagnosis might be based, and with the advancement of our knowledge the remaining difficulties will doubtless disappear.

[In the prosecution of this research my grateful thanks are due to Dr. Joseph Coats, pathologist to the Western Infirmary, who has permitted me free access to all the material in the pathological laboratory, and of whose valued advice and encouragement I have invariably been the recipient.]

Glasgow.

[3] Loc. cit. THE LANCET, vol. i. 1890, p. 792. [4] Loc. cit.

NOTES OF A CASE OF LYMPHANGIOMA CAVERNOSUM.[1]

BY W. DALE JAMES, M.R.C.S. ENG., L.S.A.

CASES of this disease are of sufficient rarity to make it worth while to place on record such as can be carefully noted and examined.

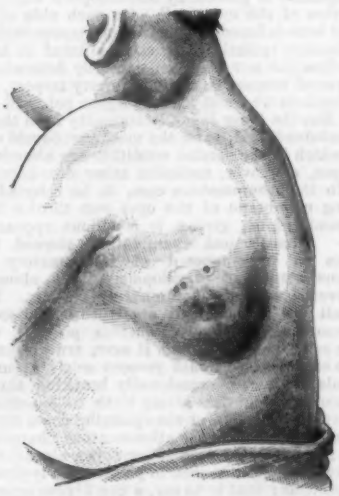
John T——, aged five, came under observation in October, 1890. He was an ill-fed, anæmic child, but without organic disease other than the tumour complained of. There was no tubercular evidence or history, no trace of nævus anywhere on the skin, nor was there any noticeable point in his family history. He presented at the left scapular angle a smooth, semi-elastic tumour, having on its surface four vesicular elevations about the size of a large pin-head. These were so tense that I thought they were horny, having failed to break them between the finger-nails. On puncture, a minute jet of fluid spirted from each. The tumour had been noticed only for six months, was smooth, slightly mottled on its surface of a bluish tint, not greatly involving the skin, but largely subcutaneous, and freely movable over the subjacent structures. Its contents could not be removed by pressure. In this state the boy was shown to the Society, and diagnosis invited. There was much difference of opinion as to the nature of the tumour, my own leaning to cystic disease. Subsequent aspiration with a fine needle showed that consecutive spaces could be emptied of small quantities (from one drachm to two drachms) of lymph, some straw coloured and some tinged with blood. Aspiration was followed by immediate rapid increase in size and deepening in colour. As the tumour was constantly getting knocked and thus giving rise to much pain,

[5] Guy's Hospital Reports, 1879. See also papers by Irvine, THE LANCET, vol. i. 1879.

[1] Being the abstract of a paper read before the Sheffield Medico-Chirurgical Society.

I removed it on Dec. 5th; the growth peeling from its bed quite easily, showing that it had no histological connexion with anything below the skin. A naked-eye examination showed a multitude of small spaces deep in the corium, increasing in size, without definite relation to their position in the skin, until the largest would admit the tip of a finger. The smallest contained straw-coloured lymph; the largest,

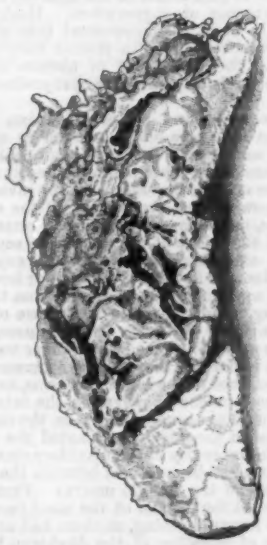
FIG. 1.



what looked like venous blood. Dr. Arthur Hall kindly undertook the microscopical examination, and has reported as follows:—

"*Morbid anatomy and pathology.*—With the naked eye the under surface was seen to be composed of a great number of cysts of all sizes, some looking blue, others not.

FIG. 2.



Section of tumour.

They varied very much in size and tenseness, the size not apparently having any very definite relation to the depth from the surface. The growth was somewhat circular, and the largest cysts, which would be as big as an ordinary marble, were situated chiefly in the central part. With the microscope, under the low power, the surface of the epithelium appears quite natural (Fig. 3), as does the dermis beneath, down as far as the level of the sudoriferous glands; but as soon as the subcutaneous fatty layer is reached, there are seen to be amongst and between the lobules of adipose tissue large and small irregular spaces, some containing granular-looking contents, consisting of shrunken lymph-corpuscles. Some of the spaces have collapsed and appear quite empty. They are surrounded by very definite cyst walls composed of dense fibrous connective tissue, separating them entirely from the groups of fat

FIG. 3.

cells. (Fig. 4.) In some of these cysts a faint indication of an endothelial lining is present. From the thickness of the fibrous walls it would appear that we have here something more than a mere dilatation of the lymph spaces. But whether the overgrowth of the fibrous tissue has preceded the dilatation of the lymph spaces by obstructing the exit of lymph from them, or is secondary to the dilatation of the lymph spaces, there is no evidence to show. It seems hardly likely that the overgrowth of the fibrous tissue should start the process, as the anastomoses of the lymph spaces are so extensive that the lymph would probably find another means of exit without any difficulty. In some of the spaces there are septa projecting into them, showing that

FIG. 4.

in all probability the walls of two adjoining cysts have broken down, and so made the two smaller into one larger space. The bloodvessels can be seen in very close contact with the spaces, in some parts being only separated from them by one or two connective tissue fibres. That these spaces are dilated lymphatic channels there can be no doubt. They are probably not the definite lymphatic capillaries, but those lymphatic spaces some of which are lined with large endothelial cells, and which Prof. Michael Foster, in his work on Physiology, speaks of as existing between the bundles of connective tissue, the contents of which bathe the tissues they surround with the lymph which they have

received direct from the bloodvessels. In a section taken from the edge of the growth the enlarged spaces are seen in an earlier condition, and here some have a definite, moderately thick wall, while others are represented by merely enlarged openings between the meshwork of fibrous tissue. It would seem that this growth has not been due to obstruction at any of the lymphatic glands, as it is so circumscribed and rounded, and does not continue up to the nearest lymphatic gland. It differs from the lymphangioma described by most authors, as being situated, not in the papillary layer of the dermis, but more deeply, and is probably due, not to an obstruction, but a congenital hyperplasia."

In this opinion Dr. Hall is supported by no less an authority than Dr. Louis Torok, now of Paris, who has recently analysed all the known cases, and published his conclusions in the *British Journal of Dermatology*. He finds in the dilatation and hypertrophy an analogue to that which takes place in congenital elephantiasis preceding the leathery thickening, which characterises that disease. Like it, too, it would seem to be congenital. Alteration in the quality of the lymph cannot account for so purely local a disease, nor does accidental occlusion of a lymph channel seem sufficient to cause the rather involved processes of dilatation with absorption of some septa, together with the marked hypertrophy of others which accompanies it.

As a question of treatment merely the case does not possess any great interest. Its rarity entitles it to careful mention.

Sheffield.

ON CYST AND ABSCESS OF THE MIDDLE TURBINATED BONE.

By GREVILLE MACDONALD, M.D. LOND.,
PHYSICIAN TO THE HOSPITAL FOR DISEASES OF THE THROAT.

THE cases comprised under the above heading are of sufficient rarity to raise doubts in the minds of even the most experienced as to their real nature. Consequently it may be considered not inopportune to give some account of their origin, pathology, diagnosis, and treatment according as the observation of five cases of cyst and one of abscess have instructed me. So far as I am aware, the only reference to them to be found in the literature dealing with diseases of the nose is a case related by Dr. P. Macbride in a communication to the Medico-Chirurgical Society of Edinburgh on November 7th, 1888, besides a brief and partly erroneous account, detailed from the observation of two cases in my treatise on Diseases of the Nose, pp. 84 and 95. In the former reference bilateral osseous cysts were described as containing air, one of which was redistended after crushing with forceps; in the latter it was attempted to show that the development of such structures might be analogous to that of similar tumours of the long bones, a view which will be presently shown to have been hasty and incorrect. The pathological etiology of cysts involving the middle turbinated is simple enough. The process in all probability begins in an osteophytic periostitis, a condition common enough in this region, and resulting in a general increase in the size of the bone in every diameter. The free margin of the bone being incurved upon itself, the extension inwards of this border, from the pathological process just mentioned, will bring it in contact, and ultimately in union, with the body of the bone. Thus a cavity may become enclosed and sealed at all points by a similar process occurring at the two extremities. Adhesions in various localities are by no means uncommon in the nose, and are fully exemplified in the further history of these cysts. To express it in other words, this bone hypertrophy may result in the production of a cavity, lined with mucous membrane, and generating mucus, which from the lack of outlet gradually distends the cavity into which it is secreted. Thus are acquired the extreme thinness of the cyst walls, and the enormous size sometimes attained, with adhesions to, and distortion of, neighbouring structures. Moreover, as must be well known to those making a special study of nose pathology, an osteophytic periostitis is not infrequently associated with the development of mucous polypus, structure which is in certain quarters recognised as no more than an expression of a peculiar development of inflammatory products, due to special local conditions. Thus also is accounted for the fact that these cysts are often, perhaps generally, associated with polypi, which may be found studding the external surface of the tumour, or more or less completely filling the interior. So that these cysts might be defined as accidental occurrences in the development of inflammatory disease affecting every tissue of which the middle turbinated body is composed.

That the above is the correct explanation of the remarkable neoplasms is proved by microscopical examination of any portion of the cyst wall. On each side of the thin lamina of bone is found a layer of mucous membrane covered with columnar epithelium, whether ciliated or not on the inner surface has not been satisfactorily determined. The outer layer of mucosa is normal in every respect, except in those situations where it has undergone polypoid metamorphosis. But the inner layer, presumably from the pressure of the contained fluid, is for the most part devoid of mucous glands, which in the normal condition are abundant. The inner layer, moreover, indicates other noteworthy alterations. In the atheromatous case, to be referred to again, the lining membrane of the cyst was thrown into rugæ and mammillations, giving it a villous appearance and texture. Microscopical examination showed these excrescences to be composed of inflammatory products in various stages of development, but almost everywhere covered with the columnar epithelium. They presented all the varieties of structure comprised in the tissue recognised as that of mucous polypus, which, it must be remarked, is seldom, if ever, truly myxomatous. Here the excrescences would present solely accumulations of granulation-tissue, occasionally breaking through the epithelium, and doubtless giving birth to pus-cells as well as to fatty degeneration of the epithelial cells, the presence of which doubtless gave the atheromatous character to the contents; while there, close at hand, the elevation beneath the epithelium might be seen to present the typical appearance of polypus; that is to say, a fine fibrous network with wide spaces enclosing sparsely scattered cells of an inflammatory origin, varying in size and shape, being more or less spherical or spindle-shaped. The breaking down of the epithelium and its substitution by granulation tissue may suggest that the case should be considered rather one of abscess than of cyst. But this surface ulceration appeared to be exceptional rather than the rule; while, after washing out the cavity, when only a small portion of the walls had been removed to gain access to the interior, there was at no time any evidence of suppuration. Doubtless the cyst might readily have been converted into abscess, a contingency not infrequent with similar neoplasms in other regions; and the rare cases of abscess of the middle turbinated possibly originate in a cyst produced by retained secretion.

The cysts are found of varying size, in my cases varying from that of a filbert to such as would probably contain half an ounce of fluid. When very large they may form adhesions to the septum, inferior turbinated body, and even the floor of the nasal fossa. They invariably produce deviation more or less pronounced of the septum to the opposite side, and sometimes induce a certain amount of flattening of the bridge of the nose from separation of the nasal bones and nasal processes of the superior maxilla. This distension and flattening are more or less symmetrical, the deviated septum on the other side from that containing the cyst being there the immediate cause of the pressure. The contents of the cysts are usually mucus, with more or less polypous growth attached to the inner wall; but, as has already been remarked, they may be atheromatous. In the instance mentioned of the latter there was, as might be supposed, no development of polypi in the interior, although these were found to a small extent on the outside. In the case of abscess of the middle turbinated the pus had found an outlet into the cavity of the maxillary sinus, presumably after adhesions had been formed between the cyst wall and the outer wall of the middle meatus. From the antrum the pus reached the interior of the nasal fossa, apparently through the normal opening, as there had at no time been any evidence of retention of the discharge in the form of swollen face &c. On opening the cavity of the middle turbinated abscess it was found more or less completely filled with pendulous masses of granulation tissue.

The symptons differ in no way from those due to other forms of obstruction, pressure, or irritation within the nose. Thus we find the not uncommon consequences of stenosis in the form of chronic inflammation of the pharynx and

larynx, and the further respiratory passages; besides which there may be various auditory troubles due to Eustachian obstruction. As consequences of the pressure in five of the cases referred to external disfigurements, adhesions to neighbouring structures, and intense trigeminal neuralgia were developed, and, as resulting from the irritation, there were sneezing and rhinorrhœa. Only in the case of abscess was there a purulent discharge, and other symptoms referable rather to the coexistent empyema of the antrum.

The diagnosis presents no difficulty. Whenever an osseous tumour presents itself in the middle meatus of such a size that it is obviously something further than a simple osteophytic periostitis, whether presenting an osseous surface covered only by mucous membrane or whether it is concealed partially or entirely by polypoid growths, the probability is strongly in favour of cyst. When, moreover, these appearances are accompanied by a purulent and fœtid discharge, one may safely surmise that he is dealing with a suppurating cyst or abscess of the middle turbinated. The diagnosis is finally substantiated by the removal of a portion of the walls of the tumour by snare or forceps. The treatment is simple enough in cases where the tumour has not attained enormous dimensions. The simplest way of effecting removal is to throw a strong snare round the mass and remove as large a portion as possible. The remaining portion of the walls may afterwards be broken away with forceps. When the cyst is very large, and adhesions have formed to neighbouring structures, the adhesions must be severed in the manner most easy of accomplishment—that is to say, with the knife or electric cautery. In some cases possibly a saw might be necessary. Then, a sufficiently large hole having been made, a pair of strong forceps is introduced, and the walls torn away piecemeal.

Harley-street, W.

A CASE OF RECOVERY FROM ACUTE INFECTIVE ENDOCARDITIS.

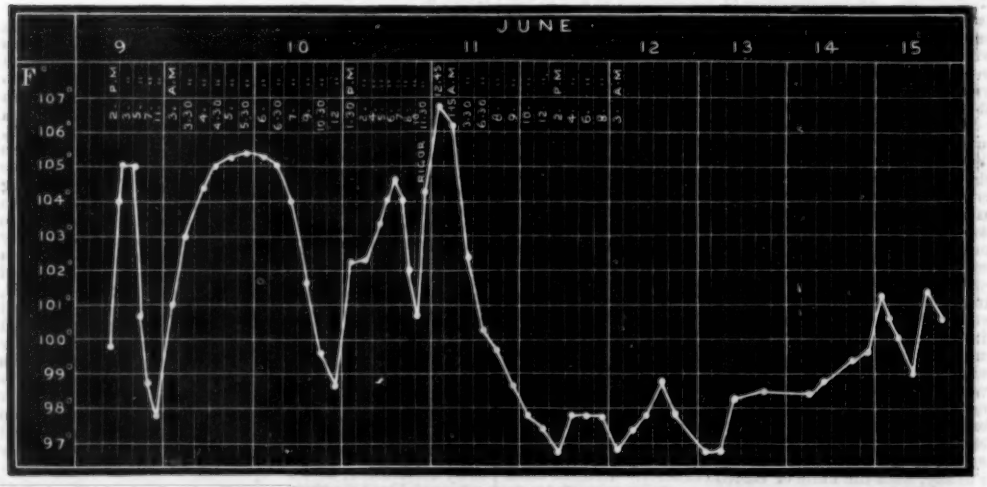
BY EDMUND CAUTLEY, M.B. CANTAB, &c.

REFERRING to one of the latest text-books on the Practice of Medicine I find it stated, in reference to the disease known as "malignant" or "infective endocarditis," that "it is doubtful if any well-marked case of the typhoid or pyæmic form has ever recovered" (Taylor). The patient whose case I here record has undoubtedly recovered; and seeing that it is now more than nine months since he left the hospital and that he was seen on Feb. 2nd to be in perfect health, except as regards a permanent tricuspid murmur, the cure may be justly considered a permanent one. Consequently I think the case well worth recording; and, thanks to the kindness of Dr. Andrew, under whose care it was, I am permitted to make it public. Naturally the diagnosis at first was somewhat doubtful; pyæmia, malaria, and typhoid fever being also suggested as possible causes. It was eventually based on the extraordinary character of the temperature, the rigors, the cardiac murmurs and their variability, the enlargement of the spleen, the profuse sweating, anæmia and progressive emaciation. There was no evidence of anything which might cause pyæmia, no history of exposure to malarial poison and a complete absence of some of the most diagnostic features of typhoid fever, such as rose spots and diarrhœa. The case accords very well with the clinical picture of the pyæmic variety of the disease; rigors were very frequent and severe, the temperature very high, intermittent and irregular, and the right side of the heart was the one mainly, if not independently, affected. There was never any diarrhœa, rather constipation, which was pretty constant and a little troublesome, and on one occasion only was a trace of albumen found in the urine. I would point out further that the cardiac murmurs at the lower end of the sternum and at the apex were present on admission, that these varied in intensity, and that at times a systolic murmur was heard over the base; that the two latter disappeared during convalescence and are absent at the present time, so in all probability they were purely functional, and the actual inflammatory process never extended to the left side of the heart.

At one time it was thought that the attacks of pain in the sides were due to infarction of the lung, but there was no confirmation of this view in subsequent occurrence of blood-stained sputa. The treatment is mentioned in the notes, and does not appear to have materially influenced the course of the disease, unless the perchloride of mercury had a beneficial effect. From June 18th to June 26th quinine was given in large doses, previous smaller doses having produced no result; apparently the temperature fell a few hours after the fourth dose, and did not again go up very high until the 24th, after which the drug did not in the least influence the temperature or the rigors. From June 28th to July 9th aconite was given in small, frequent doses, and certainly a lower level of temperature was maintained, but on July 8th 104·6° was reached in spite of nineteen successive doses previously, and the rigors being much less frequent and severe. From July 12th to 24th liquor hydrargyri perchloridi was given, and the temperature maintained an almost normal level, except for a temporary rise on the 21st and 22nd. Unfortunately it had also been normal for a day and a half previously to the exhibition of this drug. There was a further rise on the 31st to 104·8°, and the drug was again administered; next day it reached 105·2°, but on the following day it remained normal, and there was no subsequent rise of importance. Undoubtedly the disease had been going on for a long time, five weeks from the time of admission, when the perchloride was prescribed, so it may possibly have run its course; still I think the result sufficiently satisfactory to warrant its trial in other cases. I may mention that the blood was examined for micro-organisms, and none found either microscopically or by cultivation; it was curiously difficult to obtain even a drop of blood by the usual method, perhaps on account of the anæmia. The following are the notes of the case.

William B——, aged twenty-one, harness maker, was admitted to St. Bartholomew's Hospital on June 9th, 1890, and discharged on Sept. 6th of the same year. He has no family history of phthisis, heart disease, ague, or neurosis. Has always lived in the Old Kent-road, and has never been laid up; he is a teetotaler, has no heavy work, has never suffered from shortness of breath, and there is no history of syphilis. Three weeks ago he suffered from nausea and vomiting for two days. He got a little better, but could take no solid food. For two weeks he has had attacks of shivering once or twice a day, lasting for three-quarters of an hour to two hours, and followed by a feeling of heat, but no sweating. A week ago he was seen in the casualty department, and there complained of frontal headache, shivering attacks twice a day, and pain all over, chiefly in the joints. There was no joint swelling. Spleen felt. Since then he has had restless nights and variable rigors, sometimes one in the night, sometimes both in the day. Anorexia; no diarrhœa. The patient was rather thin and looked ill. He shivered on admission; the cheeks were flushed; lips dry, good colour. Pupils moderately dilated. Slight central streak on tongue and rather dry. Pulse 108, fair volume, regular, very soft; respiration 80, regular, fair depth; temperature 104° three hours after admission. Heart apex and impulse natural; blowing systolic murmur at apex and a more marked systolic murmur at lower end of sternum. Chest a good shape. Lungs natural. Abdomen rather full; no tache cérébrale; no rose spots; spleen very firm and easily felt an inch and a half below the ribs. Nothing else abnormal found. He was put on milk diet, and no solid food allowed, and small doses of hydrochloric acid.—June 10th: Rigor yesterday on admission; cold stage three hours, hot stage two hours, then perspired freely. Rigor to-day; shivering from 1 to 3 A.M., hot from 3 to 6, perspiring freely until 12.30. Scarcely slept. Much thirst. Spleen a little larger.—11th: Another rigor last night; not much sweating. Only a systolic murmur at left lower end of sternum. Tongue clean. Ordered two eggs and half a pint of mutton essence. Sulphate of quinine powders, four grains, as required, for six doses.—June 12th: No further rise of temperature. Slept well. Perspired a little. Spleen rather smaller and systolic murmur rather more marked.—13th: Soap enema.—15th: Two grains of quinine every six hours.—17th: Rigor last night. No sweating. Spleen larger. Murmurs the same. Two grains of quinine every four hours.—18th: Two more severe rigors, followed by sweating. Several times a little sick. Headache. Looks worse; rather blue. Pulse 132, regular and soft. Spleen much larger. Systolic murmur louder and heard faintly at base. Five grains of sulphate of quinine every hour for four hours.—19th, 20th, and 21st: Five grains of sulphate of quinine every hour for three hours, on

CHARTS.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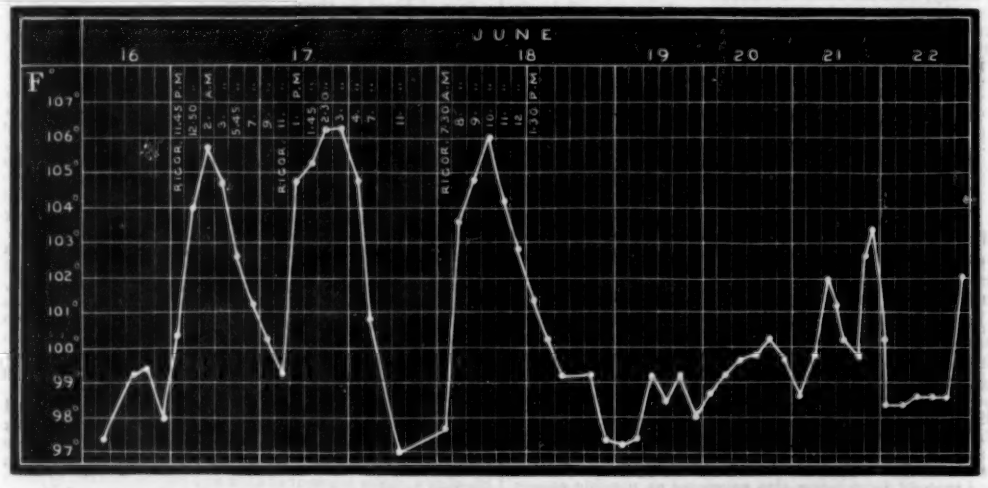
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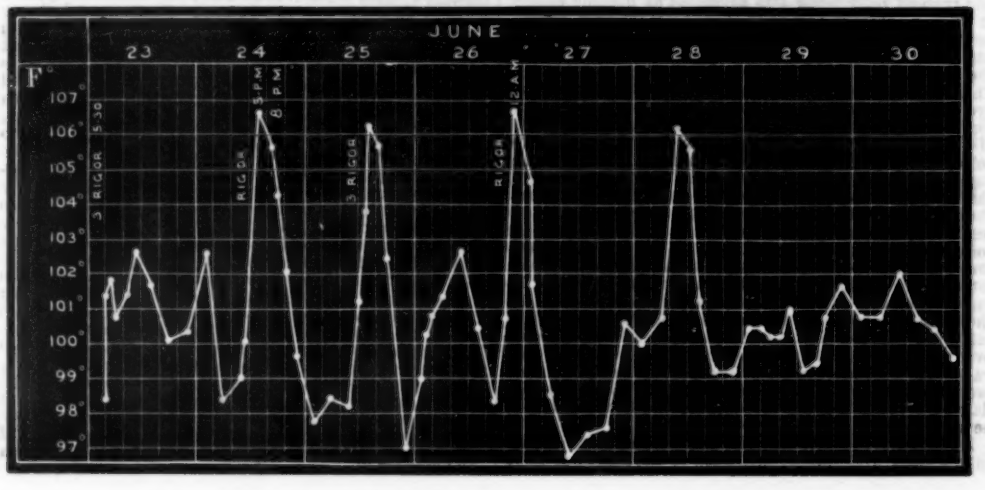
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each day.—22nd: Ten grains of calomel and colocynth pill this morning. Compound senna draught, one ounce and a half.—23rd: Temperature irregular last few days, but not so high. Slight rigor this morning, but no rise of temperature. Sweated profusely all night. Taking quinine at intervals. Spleen still large. Systolic murmur the same. Sulphate of quinine powder every two hours for two doses.—24th: Sulphate of quinine powder every four hours.—25th: Bad rigor for one hour and a half yesterday afternoon. Vomited four times. Began to sweat at 5 P.M., and sweated profusely until 7 A.M. to-day; colour bad. No pain except headache. Had only two doses of quinine in consequence. Spleen and murmur unaltered. This morning his headache is better. Has had five grains of quinine. 2 P.M.: Severe attack of pain in lower part of right axilla. No impaired resonance and no abnormal auscultatory sounds discovered. Followed by rigor. Colour bad. Pain not relieved by one ounce of brandy. Pulse 100, feeble and wiry. Given five grains of quinine. Effervescing tartrate of soda three times a day.—26th: Slight attack of pain in right side, relieved by poultices. Another severe attack at 10.45 A.M., not affected by poultices. Rigor began at 10 A.M., and pain came on in the course of it. Respiration short and catchy. Colour fairly good. Pulse good volume, but a little irregular. Morphia injection (one-fifth of a grain), given at 11 A.M., soon relieved the pain; caused a little vertigo. Draught of effervescing tartrate of soda, with three minims of liquor strychniæ, every six hours.—June 27th: Two slight rigors last night. Temperature 106·8° ten minutes after the second. Pain in right side during the night. Given morphia, one-fifth of a grain, subcutaneously at midnight; he complained of things swimming before his eyes. Systolic murmur heard at lower end of sternum and over second right and left intercostal spaces near sternum, loudest on left side.—28th: Passed a good night; no sweating; no thirst; slight rigor this morning; a little pain in both sides and great thirst. Bowels not opened four days. Tincture of aconite, one minim, every six hours; ten grains of calomel and colocynth pill to be taken immediately; one ounce and a half of senna mixture.—29th: Passed a good night; less thirst; takes food well; bowels opened freely; no headache. Pain between the shoulders, and for the last half hour in the left side; this pain is severe, stabbing in character, and he feels unable to draw his breath. Some impaired resonance and feeble breath sounds at extreme base; no friction or râles. One-fifth of a grain of morphia subcutaneously at 11.45 A.M.—30th: Twelve doses of aconite, the last at 3 P.M. Slept until 2 A.M., and then awoke with pain in the left side, and he has been rather troubled with it since. Skin hot; tongue clean and moist; takes food well. Friction in lower part of left axilla. Aconite recommenced at 12.30 noon.—July 1st: Only one dose in the night. Feels better. Still pain in left side. Heart as before. A little impaired resonance at right apex in front, and both bases behind; a few moist râles at bases. Spleen very much smaller. Slept until 2 A.M., then pain in left side for about two hours, and has hardly slept since. No pain now. Taking food badly. Ten-grain pill of calomel and colocynth.—3rd: Temperature keeps down. No pain; looks better. No aconite for two days.—4th: A little sweating last night. Had six doses of aconite. Taking food better.—6th: Temperature almost normal for two days. Felt chilly half an hour ago, but did not shiver. Slight frontal headache. Temperature now (12 40 noon) 101°; evening, 103°.—7th: Poor night. No rigor or sweating. Pain came on quite suddenly in right side at 10 A.M.; not relieved by poultices; getting worse since. Is evidently in pain. Respiration frequent and shallow; pulse small. Much thirst. Has had twelve doses of aconite and one-fifth of a grain of morphia injected at 12 noon.—8th: Nineteen doses of aconite. Much pain in right side last night relieved by an injection of one-fifth of a grain of morphia, after which he had severe vertigo, could not see, and was delirious. Slept well for about two hours after, and has been dozing since. No shivering. Temperature going up steadily. Sweated in the early morning. More pain now and shortness of breath. Spleen again large. Pulse 130, full and soft. Cardiac murmurs louder. Systolic murmur at apex conducted outwards.—9th: Bad night; refuses food. Nausea and nasty taste in month. Spleen smaller. Has lost flesh, and is more anæmic. Looks worse. Aconite, twelve doses; last at 3 A.M.—10th: Good night. Some pain in head at first. Takes food better.—12th: Has been taking peppermint water since the 9th. Ordered to-day one drachm of liquor hydrargyri perchloridi three times a day; colocynth and hyoscyamus pill, ten grains.—16th: Normal temperature since 10th. No pain or rigor. Sleeps and takes food well; hungry. Heart apex just inside nipple line; feeble impulse; no increased dulness. Systolic murmur at apex conducted outwards. Systolic murmur at base; rather rough and conducted into neck; loudest over second right space. Loud rough systolic murmur at lower end of sternum; spleen still felt. Fish and potatoes.—17th: Colocynth and hyoscyamus pill, ten grains.—22nd: Colocynth and hyoscyamus pill, ten grains. Another rise of temperature last night. Frontal headache, and felt hot. Aortic murmur louder. No pain in the side.—23rd: Heart apex just felt in fifth space nipple line; no murmur at apex or in axilla. Systolic murmur at lower end of sternum is unaltered, conducted outwards to apex, and lost there. No aortic murmur; dulness natural; lungs natural. Sweated a good deal last night; gums spongy and receding, and one tooth loose; coppery taste in mouth. Liquor hydrargyri perchloridi, half a drachm, three times daily. Gargle of alum.—24th: Nitro-hydrochloric acid three times daily. Omit mercury.—27th: One ounce and a half of compound senna mixture. Still a tooth loose; no coppery taste; gums recovered; gaining flesh.—28th: A little headache, bad in the night; feels hot; temperature going up.—29th: Two drachms of compound liquorice powder every morning.—30th: Temperature still up; no rigor; sweated a good deal in the night and this morning; no headache; spleen felt; takes food well; loud systolic murmur over aortic and pulmonic areas, and on each side of the lower end of sternum; lost as one approaches the apex.—31st: Acute attack of pain in left side at 10 A.M.; feeling of cold water running down spine before the attack came on; felt cold; looked cold and pinched; pulse 128. Pain relieved by three leeches. Friction rub heard on expiration. Frontal headache before the attack, and still present. 2.45 P.M.: Leeches took well; not much bleeding into poultices after. Sweated at 12.15 noon. Temperature 104·8° at 1 P.M. Continues sweating profusely, soaking sheets and pillows. One ounce of liquor hydrargyri perchloridi three times a day. Two lemons.—Aug. 1st: Temperature again high last night. One-fifth of a grain of morphia given subcutaneously was again followed by vertigo and delirium. Fair night. Much sweating. Looks better.—2nd: Temperature 105° yesterday; profuse sweating; subnormal now.—6th: No further rise. Looks very comfortable. Gums spongy. Teeth rather loose. Coppery taste in mouth. Spleen felt. Apex inside nipple line; murmurs the same. No evidence of hypertrophy. The patient to have half meat diet, two eggs, two lemons, two ounces of wine, a pint of milk extra; nitro-hydrochloric acid with sulphate of quinine every six hours.—8th and 9th: Slight rise of temperature.—13th: Looks better. Systolic murmur at right border of sternum, left of sternum, and less distinctly at apex.—19th: To have citrate of ammonia and iron with four minims of liquor arsenicalis, three times daily. Gets up.—20th: Gain of one pound since admission. Soft systolic murmur at apex, and heard very faintly in axilla; murmur at lower end of sternum as before. The patient to have full diet, two eggs, two ounces of wine, and the draught and powder to be repeated.—27th: Gain of seven pounds in a week. Large appetite. Up most of the day. Apex just inside nipple line.—Sept. 2nd: Gain of four pounds. Loud systolic murmur at lower end of sternum, rapidly lost on approaching apex, and not heard in the axilla. Went to a convalescent home for a month. Feb. 2nd, 1891: Says that he was ill for a few days after returning from the home, and had some slight shivering. Since that has been quite well and strong, and not short of breath. There is no evidence of cardiac hypertrophy; the apex is just inside the nipple line in the fifth interspace, and dulness is normal. A loud rough systolic murmur is heard at the lower end of the sternum, conducted an inch and a half to the right of the middle line, and fades away rapidly to the left of the middle line, almost entirely lost at the apex, and not heard outside it; conducted upwards as far as the third costal cartilage on each side. No venous pulsation in the neck. General condition excellent.

Upper Brook-street, W.

WALSALL COTTAGE HOSPITAL.—The honorary treasurer of the hospital has just received from the executors of the late Mrs. Annie Adams, Fillongley Lodge, a legacy of £1000, free of legacy duty.

TREATMENT OF GOITRE BY PARTIAL EXCISION, WITH FOUR CASES.

BY LOUIS E. STEVENSON, M.B., B.C. CANTAB.,
LATE HOUSE-SURGEON TO THE CUMBERLAND INFIRMARY, CARLISLE.

GOITRE in the young seems more liable to be followed by serious symptoms than in those who have reached adult life. The trachea of youth is naturally less adapted to resist pressure, and the presence of a goitre would appear to excite spasm of the glottis more readily in youth. A rapidly growing goitre in a young person is a serious subject for contemplation to the practitioner under whose care the case comes, as it is liable at any time to cause serious danger either by direct pressure or by exciting spasm of the glottis. These growing goitres kill swiftly and suddenly on occasion, and I know of several instances where the doctor on arrival after a hasty summons either found his patient dead, or so far gone as to be beyond medical skill. The amount of stridor does not always give an adequate warning of the impending danger, and for this reason also these goitres are justly dreaded. I hope the recital of four cases we have recently had in the Cumberland Infirmary under Dr. Lediard's care (and to whose kindness I am indebted for permission to publish them) may be of interest to the profession. I shall briefly narrate the cases and deal with the general question afterwards. The procedure adopted in all of them was excision of half the growth. The first case was very alarming, as the girl was breathing with the utmost difficulty, and had been several times unconscious for a few moments before she was placed on the operating table. The idea at first was to remove the isthmus of the thyroid, but this failed to relieve, as will be seen from a narrative of the case.

CASE 1.—Isabella N——, aged sixteen, admitted on Oct. 11th, complaining of difficulty of breathing. For two years has noticed that her neck was large in front, and during the last fortnight has had great difficulty in breathing. On admission she had a large goitre, the right lobe being especially hypertrophied. Breathing markedly stertorous. She improved a little during the day, but towards evening her breathing became greatly embarrassed and loudly stridorous; cyanosis of face was well marked, with occasional loss of consciousness for a few moments at a time. Patient was placed on the operating table, and under chloroform the thyroid isthmus was cut down upon, and, after being ligatured firmly in two places, was excised. No relief of the breathing followed. After a little difficulty the right half of the growth was now removed, the operation being necessarily hurried, as the patient was *in extremis*. The right superior thyroid artery gave a little trouble, but was soon tied. The trachea was deflected to the right side, and very small indeed. After removal the breathing rapidly improved. The wound was stitched and a drainage-tube inserted. A light antiseptic dressing was applied and a bronchitis kettle set in operation.—Oct. 12th: Temperature rose to 102°; breathing much easier; some mucous rattling in throat.—17th: Has done well. Stitches removed. Very little discharge. Temperature normal. No mucus in air passages now. Feels very easy.—On the 29th the wound was quite healed, and the patient was discharged on Nov. 5th. Her breathing was perfectly normal, and the left lobe had diminished to a quarter the size it was on admission.

CASE 2.—John E M——, aged ten, was admitted on Oct. 8th. He complained of swelling in the neck. On admission the patient had goitre, the left lobe being larger than the right. Has occasional stridor. He was put on five-grain doses of iodide of potassium and kept in bed, but breathing gradually became worse, but never became so bad as in Case 1. On Oct. 20th the left lobe was excised; the method adopted will be detailed afterwards. He made a rapid recovery, and on his discharge on Nov. 8th breathing was perfectly normal and the right lobe had diminished remarkably in size. This was not a large goitre, but gave rise to a marked degree of discomfort.

CASE 3.—George S——, aged fourteen, was admitted on Aug. 27th, with well-marked goitre, the right lobe being the larger. Has had the growth about a year, and it is increasing. For six weeks after admission he was kept in bed, and put on low diet and iodide of potassium in doses of from fifteen to thirty grains thrice daily ordered. On Nov. 12th, the goitre not having diminished, and it being probable that should the patient get up and resume work the stridor (from which he suffered, especially at night) would increase, it was determined to excise the right lobe, and this was accordingly done. The trachea was found to be very small, displaced on the right side, and embraced by the goitrous growth, necessitating careful dissection to free the windpipe. The patient suffered a little from shock. His temperature never rose beyond 99·8°. On the 19th the stitches were removed, and by the 27th the wound was healed. No return of stridor. On his discharge on Dec. 3rd his breathing was quite quiet, and the left lobe had diminished considerably.

CASE 4.—George L——, aged seventeen, was admitted on Nov. 28th, 1890. Goitre began six months ago, and is rapidly increasing. Shortly before admission he began to have trouble with his breathing, and had been taking iodide of potassium without benefit. The right lobe was larger than the left. Great stridor at night. This patient was operated on, under chloroform, on Dec. 1st. The trachea in this case was fairly large and firm, but the goitre was firmly adherent to and surrounding the windpipe. Some superficial veins gave some trouble in this operation, but were securely ligatured before excising the right lobe. Patient suffered from tracheitis, but not severely. The wound in this case healed rapidly except at its lower end, where some exuberant granulations gave some trouble. He was discharged on Jan. 7th, 1891, with perfectly normal breathing. In this case also there was a remarkable diminution of the left lobe before discharge.

These last three cases were treated without the bronchitis kettle after operation. I have seen all these cases recently, and they all continue well.

These, then, are the salient points in the cases, and their success is undoubted. We have here four patients, one of whom would certainly have died (Case 1) but for operative interference, and it is probable Case 4 would have soon died also. The other two cases were not so urgent, but it is possible that danger has been averted from them by operation. The operation of excision of half the growth is not a new one, but the points in its favour are many. In the first place, it cures the patient of his troubles once and for all, as in all these cases it was found that the stridor &c. disappeared after operation, and normal breathing was restored. Now in an urgent case no doubt we should think of tracheotomy or intubation first for relieving the symptoms; but, if the trachea be as small as it was in Cases 1 and 3, it will be found difficult, if not impossible, to introduce a tube. There is also the difficulty of getting beyond the point of pressure, or the trachea may be so covered up by goitrous growth that even if it be found—and it may be displaced,—the introduction of a tube may be extremely difficult. It is alleged by some writers that some of these stridorous attacks are allied to asthmatic seizures, in which case one would expect the inhalation of chloroform to relieve; but in our first case I especially noticed that the anæsthetic did not relieve the breathing in the slightest degree. I do not think intubation has been much used in goitre; but whether tracheotomy or intubation be resorted to, the relief they might bring can only be temporary; the cause of the danger is still there, and is ready to give trouble again at any moment. It is possible that at a second attempt these measures might meet with scant, if any, success; whereas should the disease be attacked by removal of half the gland, as has been done in the above cases, anxiety and danger are removed for ever. For the country doctor, alone with his struggle with death, the operation of course will not be easy; but if a case of goitre come under his observation before very serious symptoms have developed, he could then obtain help to have this operation done, should he deem it advisable. Another point in favour of this operation is that in cases where the trachea is surrounded and embraced by the growth, the windpipe is defined and the goitre is entirely dissected away from it. Another point is that in all these cases excision of half the growth has been followed by a remarkable diminution of the remaining half; and even granting the possibility of further hypertrophy, it is extremely unlikely, I think, that the trachea will again be in danger, as it will have more room now to be thrust aside and accommodate itself to altered circumstances.

Another and very important point in favour of this pro-

ceeding is that it is practically certain that none of these cases will be followed by that curious disease, myxœdema. Professor Kocher of Berne, who writes on the subject of goitre, and who has performed numerous operations for the relief of the disease, says that in none of his cases of partial excision whose after-history he was able to trace was there any deterioration of the general health observable; whereas in his cases of total extirpation, the after-history of which he was able to trace in sixteen instances, more or less marked signs of derangement of general health were manifest. This derangement, he says, was of a progressive character, being more noticeable in the oldest, and least so in the more recent cases that had been operated upon. The cases, as he describes them, develop gradually into a condition which is identical with myxœdema. With these points in its favour, I think the operation is the best for all purposes. Excision of the isthmus, recommended by Sydney Jones, has undoubtedly been a successful operation in many cases, but in Case 1 it failed. If the trachea be not central in position, and if it be embraced and surrounded by the goitrous growth, it is obvious this operation cannot be of much avail. It will be useful where the trachea is central, and where the goitre can easily be freed from the windpipe, otherwise excision of half the gland is preferable. Ligature of the thyroid arteries as a cure for goitre is not satisfactory, as the blood can gain access to the growth by other channels for its nourishment and increase. I have seen one case of cystic goitre treated by incision of the cyst and drainage, but in this case there were no respiratory troubles. The case ultimately did well, and the goitre was greatly diminished, but there was a good deal of inflammatory action; and if inflammatory trouble were added to a goitre already causing difficulty of breathing, the result might be very serious indeed.

With regard to the method of operation adopted in these cases, it resembles that of Heron Watson. An incision was made in the middle line of the neck from the upper to the lower limit of the tumour, cutting through the fascia; the delicate fascia lining the goitre itself was not interfered with. The next proceeding was to define the outer edge of the offending lobe, which is found usually well under the inner edge of the sterno-cleido-mastoid muscle. The outer edge being defined, the superior and inferior thyroid vessels were tied separately after passing a threaded needle, including the vessels and their fascial investment. The advantage of including the fascia is that the vessels are quickly growing and friable, increasing as they do quickly to supply the increasing demand for blood in the enlarging gland, and by including this fascia in the ligature the vessels are less liable to be cut through. When the vessels are tied and cut through on their distal side, the growth is dissected carefully with scissors, snip by snip from the underlying parts. If the growth be adherent to the carotid sheath, greater care of course must be practised. In this way, by careful dissection, the growth is gradually separated from underlying parts, including the trachea. When the windpipe is free and the middle line reached a ligature is passed round the isthmus on the side where the remaining lobe lies, and the gland is cut away. The treatment then is on ordinary surgical principles, free drainage being essential, as the wound-cavity is irregular. There was no trouble with bleeding after any of the operations.

With regard to the after treatment little need be said. Some advise the bronchitis kettle, and I used it in Case 1, as the trachea had been handled a good deal; the objection to the use of the kettle is that it increases the mucous secretion, which is undesirable where rest to the trachea and surrounding parts is required; still the patient in Case 1 was quite comfortable during the time the kettle was in use. The other cases did not have it; in each case there was some trouble with mucous secretion, but not much. There is no doubt the trachea should be handled as little as possible during the operation. It will be noticed that all these cases occurred in young people.

Carlisle.

A NEW ISOLATION HOSPITAL.—Notwithstanding the failure of the negotiations for a joint isolation hospital for Tottenham, Edmonton, Enfield, Wood Green, and South Hornsey, the Enfield Local Board are about to erect a hospital upon the site which had been obtained for the proposed joint hospital. Patients suffering from infectious diseases (except small-pox) will be received from South Hornsey upon payment of an agreed sum.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

A CASE OF SENILE CHOREA; MANIA; RECOVERY.

(Under the care of Dr. FERRIER.)

THOUGH chorea is essentially an affection of childhood or youth, it occasionally occurs, with all the features of the juvenile type, in advanced age (from seventy upwards), and runs the usual course in a few weeks or months. Such cases are, as a rule, uncomplicated by symptoms of mental aberration. Very frequently, however, chorea in the aged is associated with mental symptoms, either mania or dementia (primary or secondary), and is of a chronic and incurable character. From an inquiry into the relative frequency of chorea among the inmates of the asylums in America, Diller[1] estimates the percentage to be 1 in 425. The following case is worthy of record as a typical example of hemichorea occurring in advanced life, in which, however, notwithstanding the association of acute maniacal symptoms, complete recovery ensued. When chorea occurs in advanced life it is not unusual to find a history in other members of the family, and is really hereditary, and recently Drs. Suckling,[2] Foerster,[3] Dadge,[4] and Sollier[5] have recorded examples of this senile chorea. In the paper by Dr. Diller, several cases are alluded to in which chorea at an advanced age was followed by mental aberration of some sort or other, but none of them recovered from the mental disease.

Susannah G——, aged seventy, was admitted into King's College Hospital, under the care of Dr. Ferrier, on Jan. 23rd, 1891. She had previously enjoyed good health. Though she had suffered occasionally from rheumatic pains, she had never had acute rheumatism. One brother had suffered from rheumatism, but there was no history of chorea or rheumatism among any other members of the family. Two of her sisters died of phthisis. In February, 1890, she had an attack of chorea on the left side, which came on gradually and lasted altogether two months. This attack was not accompanied by any mental disturbance. The present attack commenced a few days before Christmas with a "severe bilious attack," followed by spasmodic jerkings of the right arm and leg, which came on gradually and increased in intensity. These symptoms were accompanied by great irritability of temper and sleeplessness.

On admission, the patient presented typical choreic movements of the right side of the body, face, arm, and leg. Examination of the heart, lungs, and abdominal viscera revealed no abnormality. On the night of admission she was sleepless, and next day became very excited, imagining that people were going to poison her, and shrieking "police," "murder," &c., and struggling with the attendants. She became so violent and noisy that she had to be removed to an isolation ward and put into a strait-jacket. She altogether refused food and medicine, and required to be fed by nasal tube. The administration of large doses of bromide of potassium and chloral hydrate considerably moderated her excitement, but she continued more or less in the same state until Feb. 16th, when she was removed to her own home by her friends. The choreic movements of the right side had in nowise subsided at the time of her removal. She remained at home under the care of Dr. Prickett, and was seen by Dr. Ferrier again on March 13th, at which time the choreic movements were still well marked, and the patient was exceedingly excited and talkative. On April 8th the choreic movements were much less marked and the excite-

[1] American Journal of Medical Sciences, December, 1889.
[2] THE LANCET, vol. i., May, 1889.
[3] New York Med. Journal, Feb. 1889.
[4] Medical News, July 28th, 1889.
[5] Bull. de la Soc. Anatomique, May, 1888; and Annual of the Universal Med. Sci., 1889, vol. ii., B. 55.

ment had almost gone. The choreic movements of the right leg caused her to walk somewhat unsteadily. On April 25th she was quite clear and rational, and the choreic movements had practically disappeared. The treatment consisted mainly in the administration of bromide of potassium, arsenic, and quinine.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

RENAL CALCULUS; LEFT NEPHRO-LITHOTOMY; USELESS RIGHT KIDNEY; SUBSEQUENT PYONEPHROSIS AND NEPHROTOMY; DEATH FROM URÆMIA.

(Under the care of Mr. PAUL SWAIN.)

RENAL CALCULUS in children is well known as an occasional occurrence, but the cases in which it has caused symptoms of sufficient severity to induce a surgeon to operate on the kidney for its removal are few and far between. It may be met with at almost any age, but is generally found post mortem in some cases where its existence was not suspected. The extensive disease of the kidneys found in the following case, where the presence of tubercle in other parts might have biased the diagnosis in favour of tubercular kidney, is interesting. There are several points in the case which merit attention. For the subjoined notes we are indebted to Mr. W. Gifford Nash, house surgeon.

W. C——, aged seven, was admitted on Sept. 12th, 1889. He had had symptoms of disease of the right hip joint for two years. On examination, the right leg was flexed, considerably fixed, and could not be extended without producing great lordosis. A weight extension was applied.

Nov. 4th.—There has been vomiting after breakfast for three days, without apparent cause.

13th.—The urine contains one-tenth albumen. Under the microscope are seen pus cells and phosphatic crystals. Micturition frequent and painful.

23rd.—The prepuce, which was adherent, was stretched.

24th.—The urine contains one-eighth albumen.

28th.—The child sweats profusely if kept waiting when he wishes to micturate. The urine contains pus, but no crystals.

Dec. 9th.—Was sounded under methylene; nothing found.

12th.—Weight extension omitted.

25th.—He has had abdominal pain and a rise of temperature for a few days. To-day he passed a round worm.

Jan. 2nd, 1890.—He still pulls the penis about. Passed a second round worm.

6th.—There is no pus in the urine.

10th.—The urine contains hedgehog crystals.

20th.—Urine now acid; still contains pus.

March 13th.—He gets screaming fits at night, apparently due to cramps in the left leg.

April 23rd.—Urine contains about one-twentieth pus.

May 31st.—Attack of cramp in the left leg last night.

July 25.—Methylene. Sounded; no stone or other cause for pyuria found. Circumcised.

Aug. 6th.—Less pus.

14th.—No crystals.

Oct. 6th.—There is a diffuse doughy swelling over the back of the right carpus. Wrist-joint not affected.

Nov. 5th.—He complains of pain in the abdomen. Has been vomiting occasionally during the last three days.

7th.—Considerably more pus in urine.

12th.—The appetite is poor. No change in carpal swelling; no hip symptoms.

26th.—Last night he had a great deal of pain in the region of the left kidney (renal colic). He was sick several times. There is tenderness over the left half of the abdomen. Testes much retracted. About one ounce of urine passed in fourteen hours, loaded with muco-pus.

27th.—Abdomen still distended. Has passed eight ounces of urine in the twenty-four hours. There is dulness in the left flank behind.

28th.—Abdomen less distended. Dulness has disappeared. Passed thirty-seven ounces of urine in twenty-four hours.

29th.—Thirty ounces of urine. No tenderness in the left groin.

30th.—Urine forty-two ounces. Boy complains of pain in left loin, which is extremely tender on the slightest pressure. Temperature 100·4° last night.

Dec. 1st.—Urine thirty ounces. Great deal of pain in left loin, where a rounded lump can be felt below the ribs. In the left ilio-costal space is a distinct bulging elastic swelling, dull on percussion. The child lies with the left thigh flexed. Aspirating needle inserted three inches into swelling, but nothing but blood escaped.

2nd.—Methylene was administered, and the left kidney exposed by the lumbar incision. It appeared pale and enlarged. The finger was passed along its posterior border, and some thin watery pus escaped, apparently from a post-nephritic abscess. A small stone was felt lying in the pelvis of the kidney. The overlying tissue was scratched through, and a stone about the size of a pea removed. Four other smaller stones were found. A drainage-tube was inserted, and the wound stitched up.

3rd.—Nineteen ounces of urine passed from bladder. It contained less pus.

On Dec. 4th 19 oz. of urine passed per urethram; on the 5th, 18 oz; on the 6th, 14 oz.; on the 7th, 18 oz.; on the 8th, 17 oz; on the 9th, 22 oz.; on the 10th, 18 oz.; on the 11th, 3 oz. (there is no pain, tenderness, or swelling in position of right kidney); on the 12th, 5½ oz; on the 13th, 5 oz; on the 14th, 16½ oz.; on the 15th, 16½ oz.

It seems that the right kidney is either absent or almost completely destroyed; for on the three days, the 11th, 12th, and 13th, only 13½ oz. of urine were passed, containing a lot of pus, some of which probably came from the left kidney. No kidney can be felt in the right loin.

On the 16th the patient passed 5 oz. of urine; on the 17th, 8 oz.; on the 18th, 1½ oz.; on the 19th, 6 oz.; on the 20th, 1 oz; on the 21st, none; on the 22nd, 1 oz.

Jan. 8th, 1891.—No urine passed from the bladder since Dec. 26th. There is considerable enlargement of right kidney, and the temperature rises above 100° at night, suggesting suppuration.

14th.—No urine from bladder. The enlargement of the right kidney increases.

19th.—He rapidly gets worse as the kidney enlarges.

21st.—The child was very ill throughout yesterday. Had great pain on the right side of the abdomen, and was constantly sick. Had a rigor at 10 A.M., and at 2 P.M. the temperature was 102°. Since then he has passed very little urine from the left loin. Methylene was given, and an incision made in the right loin below the last rib. The kidney was found about a quarter of an inch from the surface. It looked pale, and bulged into the wound. Pus came through a cannula introduced. The opening was enlarged and the abscess washed out. About two or three ounces of pus escaped, and in it were numerous small calculous masses. Several small abscess cavities communicated with the one opened.

22nd.—At 6.30 A.M. and 7.30 A.M. he had left-sided convulsions, after which he was several times generally convulsed.

23rd.—12.15 A.M.: Death from uræmia.

Post mortem examination (Jan. 23rd).—The body was emaciated to an extreme degree, not an atom of fat anywhere. Lungs and heart not diseased. Kidneys were both much enlarged and adherent to the overlying colon. There was an opening into the pelvis of each from the loin. The right kidney was about three times the natural size. On section very little if any renal tissue remained. The kidney was studded with abscesses, each of which contained a calculus or some mortary matter. The pelvis was completely blocked with calculous material, and the ureter contained a calculus. The left kidney was also about three times the natural size. The pelvis and some of the calyces contained purulent urine and calculi. There was a little secreting tissue left. The upper end of the ureter was blocked by a calculus. The calculi, of which there were fifty or sixty present, varied in size from a millet seed to a large pea, and consisted of amorphous phosphates with a few concentric rings of uric acid. The bladder was empty, contracted, and thickened. Right hip-joint: The head of the femur was very carious, and much of it absorbed. Acetabulum carious. The joint contained purulent fluid. The kidneys were sent to the Middlesex Hospital museum, where Mr. Henry Morris and Dr. Sidney Martin very kindly examined them, and reported that the changes in the kidneys were entirely due to the calculi, and no tubercular disease was present.

Remarks by Mr. W. G. NASH.—The interesting points in this case were the coexistence of renal calculi and tubercular disease of the hip and carpus, and the fact that such very extensive destructive calculous disease of the kidneys should have occurred without more definite symptoms. Sixteen months before death the only symptoms of renal

calculus were pus and crystals in acid urine, frequency of micturition, sweating before and after the act, rarely vomiting, and cramps in the legs. Although for a year the existence of a renal calculus was suspected, it was not until Nov. 26th, 1890, when there was a well-marked attack of renal colic and swelling of the left kidney, due to blockage of the ureter, that the existence of a calculus in the left kidney was made certain. Nor was there any evidence that the right kidney was useless until after left nephrotomy. The quantity of urine passed from the bladder gradually diminished, and gradually ceased on Dec. 26th. After this the right loin was freely palpated, with a view to prove the absence of the right kidney, and then (possibly from this manipulation) the suppuration in the right kidney rapidly increased, necessitating the nephrotomy, which was performed two days before death. It is a question when the destruction of the right kidney occurred, and when its pelvis and ureter became blocked. Possibly the symptoms were masked by those due to the hip disease. During the sixteen months' stay in hospital there was never any blood in the urine, nor, although there were so many small stones in the kidneys, was one passed.

Medical Societies.

EPIDEMIOLOGICAL SOCIETY.

A MEETING of this Society was held on May 20th, Dr. EWART, President, in the chair.

Measles, an Epidemiological Study.—A. CAMPBELL MUNRO, M.B., D.Sc., medical officer of health to the county of Renfrew, read a paper on the above subject. Measles, he said, was, with the doubtful exception of diphtheria, the only infectious disease that had not only proved unamenable to sanitary measures, but had actually increased within the last fifteen years, the mean death-rate from this disease throughout England and Wales having risen from 277 per million of the population for the decennium 1871-8 to 422 in that of 1881-90. At Yarrow, with a marked decline in the general and the zymotic mortality, the deaths from measles had risen from 274 per million in the former period to 927 in the latter. The most careful inquiry had convinced him of the evident connexion between the spread of measles and school attendance, and of the absence of any other special cause. The school attendance, which in 1871 was only 52 per 1000 of the population, rose from 68 in 1874 to 162 in 1882, or from a mean of 95 in the decennium 1871–80 to 164 in 1881–90. Dr. Ransome's theory of the production of epidemics was the proximity of susceptible persons, and Dr. Munro found in the infant department of a Board school—i.e., among those of the age most liable to measles—sixty-nine children writing on slates in a space of fifteen feet by nine, or on less than two square feet per head. No such crowding was possible in the streets or at home, while the conditions of mental fatigue and foul atmosphere were infinitely more conducive to infection than those of play and exercise in the open air. Chemical and microscopical examination by Prof. Carnelly in Edinburgh of the air of schools, of single room dwellings at night, and of bedrooms in a better class, gave the mean respective proportions of cubic centimetres of CO_2 in a litre of 18·6, 11·2, and 7·7, and the number of bacteria 151, 58, and 8·5. In one school the number of bacteria was not less than 600 per litre! In towns with a less exclusively working-class population there was a proportionately less aggregation of children in public elementary schools and a less marked tendency to epidemicity of measles. This was well seen in the adjacent borough of South Shields, where the school attendance per 1000 of population rose only from 96 in 1874 to 122 in 1882, an increase of 26 per 1000, against 94 in Jarrow. In Jarrow, as in many other towns, there was a striking biennial recurrence of epidemics; the vast majority of the cases were children attending the infants' school, and their mean age was 4·2 years. In 1887, with no data beyond those afforded by the deaths and a very imperfect voluntary notification, Dr. Munro's attempts to check the progress of the epidemic by closure of infant schools were far from successful, but in 1889 the compulsory notification had come into force, and the results of his action, which were exhibited in a diagram, were most satisfactory. Taking the day of the eruption as the date of the "occurrence," and noting only the first case in each family, on the assumption that subsequent cases were infected by this one at home, it appeared that while in no previous week had there been more than two cases, in that ending April 5th there were thirty-six, or 1 per 1000 of the entire population. Of these thirty-six children, twenty-nine were attending school, and twenty-eight the infant department of the Grange Board School. These belonged to different grades of society, and lived in different quarters, so that their mixing much in the streets was unlikely; but it was ascertained that just a fortnight previously an infant had been sent to school with the rash fully out. She was at once sent home, but had already attended for three or four days, during which she had been capable of infecting others. The school was promptly closed. Dr. Munro found that in the third week from this—i.e., at the end of the incubation period—but one *new* case was notified among children usually attending this school; this particular outbreak was stamped out, only a few sporadic cases occurring at irregular intervals during the rest of the epidemic period. In the Catholic school it did not appear till the week ending May 24th, when there were twenty-two cases, and fifteen in that following. It was closed, and only a few isolated cases occurred afterwards, though the children belonged to very poorest class. Outbreaks appearing in each of the other public elementary schools, the authorities closed them all on June 7th for five weeks, anticipating the usual holidays, so that when they were reopened on July 26th there were no measles in the town. At South Shields, where measles was not notified and the schools were not closed, no such speedy extinction of the disease was observed. The cases not being known, the deaths furnished the only data for comparison. These were for the twelve months of the year 1889 in Jarrow: 0, 0, 0, 4, 3, 15, 2, 1, 0, 1, 1, 1, and in South Shields 0, 1, 1, 0, 2, 2, 15, 6, 9, 9, 2, 1. Measles broke out again in the Dunn-street school in September and October, and in Grange-street school in November. There being little or no measles elsewhere, Dr. Munro, instead of closing the schools, kept it from assuming the proportions of an epidemic by close personal supervision, excluding all children from the infected houses so long as any danger existed, and instructing the teachers to watch for the earliest febrile or catarrhal symptoms, sending home and reporting to him any that seemed in the least degree suspicious. The success attending this procedure convinced him that could such medical supervision be exercised over all schools actual closure would rarely if ever be necessary. The diagrams showing the prevalence of measles in each of the seven schools, and in the rest of the population, proved that the outbreaks in the former were not parts of a general epidemic, but independent of, and not synchronous with, one another—each arising from a single focus, as was seen most clearly in the Grange school. The tendency to a biennial recurrence of epidemics of measles was probably never so unequivocally manifested as at Yarrow, where it had prevailed in every alternate year from 1881 to 1889 inclusive, the deaths per mille having been, from 1883 to 1890, 2·9, 0·1, 2·4, 0·03, 1·4, 0·0, 0·9, and 0·0. In Sweden, on the other hand, the tendency for the past hundred years had been, as Dr. Ransome pointed out, to a septennial recurrence, the explanation being doubtless that in a sparse population a longer period was necessary for the accumulation of material in accordance with Dr. Ransome's law of epidemic periodicity. "That these disorders can only become epidemic when the proximity between susceptible persons becomes sufficiently close for the infection to pass freely from one to the other." Depending on sociological, not on meteorological conditions, these biennial exacerbations were to a great extent developed in each centre of population independently, in different degrees, and not necessarily in the same years. Generally the odd numbers in the north of England and the even numbers in the south were those of the epidemic years, though there were exceptions in each case, and in some few towns the periodicity was erratic. These local differences tended to obscure the biennial curve for the entire kingdom, which nevertheless was distinctly recognisable in the mortality returns. There was also a seasonal curve, a higher wave in the spring and a lower in the autumn, although some as yet ill understood factors accelerated, retarded, or prolonged the one or the other, whence it followed that whereas the biennial cycle was most clearly seen in each several locality, the seasonal

curve was best defined in the death-rate of the whole country. Dr. Munro, from a consideration of these facts and the results of his efforts in 1889, was convinced that those medical officers of health who believed that all attempts to stay the progress of an epidemic of measles were futile, and that no good could follow from its notification, were in error. Compulsory notification was an essential condition of action. If this were given promptly, and all children from infected houses excluded from the schools, further steps might not be necessary. If, however, from six to ten new and independent cases had occurred within one week in an average-sized school, the infant department should be at once closed; in the senior departments, where the children had passed the age of greatest susceptibility and a large proportion had probably already had the disease, close personal supervision and exclusion of any giving the least ground for suspicion would in most cases suffice. At the same time the infected houses should be indicated to the managers of all Sunday schools, who should be induced, as at Jarrow, to carry out the like exclusion of all suspected children.—Dr. WILLOUGHBY having for twenty years been connected with public elementary education, considered Dr. Monro's paper one of the highest scientific and practical importance. In the recent discussion of the question at the Society of Medical Officers of Health he had stood almost alone in urging the notification of measles from a school standpoint, and he had in the columns of the *Schoolmaster* indicated the same mode of dealing with children from infected houses, with the further recommendation that the Education Department should be induced to extend to cases of individual compulsory absence the same allowance for enforced non-attendance made in the event of closure of an entire school. He suggested that the biennial recurrence of epidemics might have some connexion with the two years' average stay of children in the infant school, after which those who had escaped were in the upper schools "diluted" by being mixed with insusceptible or less susceptible children, and their places in the infants' school entirely filled by other and highly susceptible individuals.

After some remarks by other members, Dr. SISLEY read a short note on the Prevalence and modes of Propagation of Influenza as observed in the Epidemic of 1889–90 in this country.

OBSTETRICAL SOCIETY OF LONDON.

On Visceral Hæmorrhages in Stillborn Children; an Analysis of 130 Necropsies, being a Contribution to the Study of the Causation of Stillbirth.

A MEETING of this Society was held on Wednesday, June 3rd, Dr. J. Watt Black, President, in the chair.

Dr. HERBERT R. SPENCER read a paper on the above subject, in which he gave a detailed account of a consecutive series of 130 necropsies on fresh, mostly stillborn, fœtuses, in so far as congestion of and hæmorrhage into the viscera were concerned, together with tables of the more important organs affected, and a description of the naked-eye and microscopic appearances of the various viscera as regards congestion and hæmorrhage. The causation of the hæmorrhage was discussed, and the following practical conclusions were drawn: 1. In children stillborn, or dying shortly after birth, congestion or œdema, and hæmorrhages are usually found in various important viscera. 2. These hæmorrhages occur in cases delivered naturally or by version or by forceps through normal and abnormal pelves; in primiparæ and multiparæ; with large and small children; in "easy" and difficult, rapid and prolonged labours. 3. The hæmorrhages are, however, most frequent and most severe in children subjected to much pressure by the parturient canal or instruments or the hand of the attendant, especially when delivered by the lower extremity. 4. Cerebral hæmorrhage is more frequently found in stillborn children delivered by the forceps than in those born by the breech, and in these latter more frequently than in those born naturally by the head. 5. Hæmorrhage into most of the other viscera is more frequently met with in pelvic than in cephalic presentations. 6. These hæmorrhages and the accompanying injuries are in many cases the cause of stillbirth, and, when not immediately fatal, may be followed by the gravest consequences. 7. They are most likely to be avoided by preventing premature rupture of the membranes, by artificial dilatation of the parturient canal (when necessary), by restricting the employment of version and other artificial manipulations to urgent cases, and by preferring cephalic to podalic version in cases suitable for the former. 8. The use of the forceps should be absolutely limited to cases in which there exists some pressing danger to mother or child, and it should never be employed merely to shorten the time of labour. 9. In breech presentations, examination of the genital organs of the child should be carefully avoided during delivery. As soon as the child's limbs are born they should be wrapped in a thick layer of antiseptic wool (which keeps the child warm and prevents the hand from slipping, and protects the limb from pressure). If traction be necessary, it should be made over wool wrapped around the child's limbs or pelvis; it should never be made by the hand around the child's waist. 10. In delivering the after-coming head care should be taken that the sterno-mastoid muscles are not unduly stretched or pressed upon. When the after-coming head is in the pelvis, where there is even slight difficulty, resort should be had to the forceps.

Dr. HERMAN said is was impossible to controvert Dr. Spencer's carefully observed and recorded facts, but he could not agree that the forceps should never be used to shorten labour. In cases in which there was no pelvic deformity, nor disproportion between the child's head and the pelvis, the os uteri was fully dilated and delivery was slow simply because the pains were too weak. To quickly overcome the resistance of the pelvic floor he thought the use of forceps to shorten labour would be good practice. He thought accoucheurs all over the country used the forceps for this condition more frequently than for any other, and that they did not find harm resulting to the child. He agreed in recommending the forceps for the delivery of the after-coming head. That injuries to the brain were more common in forceps-delivered children than in those born naturally was due, he thought, to the fact that the forceps was used in the worst cases, and so the condition which rendered forceps necessary had produced the injuries.

Dr. PETER HORROCKS related three cases in which, after podalic version and delivery by traction, the children had made no attempt at respiration, although the heart was beating. In one of these an attempt was made to catheterise the trachea, but the catheter passed down the œsophagus and the stomach was filled with air. So tracheotomy was performed, and the child's heart was kept beating for an hour and a half. No effort at respiration, however, was made, and a post-mortem examination showed hæmorrhage into the fourth ventricle of the brain. In the other two cases there was also hæmorrhage into the fourth ventricle, and in one on the surface of the brain also. He had considered the total absence of all efforts at respiration to be due to pressure on, or damage to, the respiratory centre in the medulla oblongata or bulb.

Dr. DAKIN thought that many children who survived suffered from visceral hæmorrhages, some of them, as, for instance, into the muscles and cellular tissue, did not, perhaps, materially affect the child's welfare. He asked if these extravasations were, as thought by some, a cause of the milder cases of jaundice, by the absorption of their blood pigment into the general circulation, and consequent staining of the tissues. He noticed that out of twelve or thirteen cases which survived over three days only two were jaundiced. He thought the intestinal and uterine hæmorrhages would explain many of those cases in which bleeding took place from the rectum in male and from the vagina in female children.

Mr. ALBAN DORAN thought that many children were born with visceral hæmorrhages which did not kill, but which set up diseases. Large subcutaneous extravasations of blood caused by violent blows were sometimes followed by the development of a sarcoma.

Dr. LEWERS suggested that some morbid condition of the vessels might have caused the hæmorrhage in some of the cases. Considering the fact that so many children that afterwards throve had been delivered by forceps, it seemed improbable that the forceps skilfully used would often cause visceral hæmorrhage in healthy fœtuses.

Dr. JOHN PHILLIPS alluded to parturition in hæmophilic women. He had never met with a case. He related two cases of visceral hæmorrhage in newly born children; one a breech case, with hæmorrhage into the liver; the other a normal labour, with hæmorrhage from the stomach. He agreed that many so-called "asphyxial deaths" were really due to internal hæmorrhage.

Dr. HERBERT SPENCER, in reply, thought that the question of the use of forceps could not be decided by an appeal to practice, or by the statistics of stillbirths. He thought that many slight muscular or mental disabilities in after life might have their origin in these injuries. Careful observations of the after-histories of difficult forceps deliveries were very desirable. He thought many of the cases of head injury which he had recorded were clearly due to the forceps, and not to the conditions which had led to their use. He recommended the use of the forceps to the after-coming head when it was in the pelvis, and there was difficulty in extraction. He thought hæmorrhage into the sterno-mastoid muscles was frequently overlooked. He had seen cases similar to those described by Dr. Horrocks, and had found hæmorrhages in the medulla, but not in the respiratory centre. He did not approve of tracheotomy in Dr. Horrock's case. He recommended catherisation of the trachea, which he had often performed. He agreed with Zweifel that the majority of jaundice cases were due to extravasated blood, with subsequent changes and absorption.

Specimens.—Dr. W. H. KELSON: Acardiac and Acephalous Monster.

Dr. LEWERS: Polypoid Endometritis, with Blighted Ovum.

Mr. ALBAN DORAN: Water-colour Drawings of (1) Case of Congenital Auricular Sinus; absence of External Meatus on Opposite Side; Cutaneous Sinus over Sacrum; (2) Cervical Auricle.

Dr. PETER HORROCKS: (1) Multilocular Ovarian Cyst Fibroma of the Opposite Ovary; (2) Brain showing Thromboses in Cerebral Veins and Hæmorrhage into Internal Capsule in a case of Ingravescent Hemiplegia during Pregnancy and Parturition.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

A MEETING of this Society was held on May 8th, Mr. H. E. Armstrong, President, in the chair.

Sanitary Legislation.—Resuming the consideration of recent and prospective sanitary legislation the Society approved, with a few alterations, the amendments to the Public Health'(London) Consolidation and Amendment Bills, formulated by the Council. Among these were the inclusion of bakehouses, marine stores, brickfields, and the storage and removal of offal and manure among trades for which the County Council may issue by-laws; the extension of the Smoke clauses to private houses when these interfere with the health and comfort of the public; the repeal of all provisions for the recovery by the Asylums Board of the cost of their maintenance from the patients themselves; the exemption of existing appointments from the conditions of Section 35, 1 of the Amendment Bill; the accordance of liberty to the local sanitary authority to make extraordinary and temporary appointments (35, 9) without the sanction of the Local Government Board, and the withdrawal of the clause (35, 2) requiring the medical officer of health to reside in or within a mile of his district. This arbitrary and needless condition would, it was urged, have the effect of deterring men of high professional standing from seeking appointments to the worst districts, where the services of such men were most needed. In the Consolidation Bill, Section 55, 1*a*, they recommended that a certificate of efficient disinfection be received from the medical officer of health only, and not from any medical practitioner; and that the clauses of the existing Factories and Workshops Acts (including bakehouses), and of those now before Parliament, placing the sanitary control of the same in the hands of the sanitary authority, be incorporated into this Bill, with the proviso that all fines &c. be paid to the sanitary authority. The amendment standing in the name of Mr. Gaisford Bruce, M.P., restricting the practice of medical officers of health in the metropolis, provoked a warm debate, some members deprecating any such interference, but others maintaining that while it was highly desirable that, provided they enjoyed adequate salaries and fixity of tenure, they should be debarred from engaging in medical, or at any rate from general practice, no restriction ought to be imposed on them as to holding professorships, acting as visiting physicians to fever hospitals, or as experts and consultants in medico-legal and public health questions. Much uncertainty existing as to the precise wording of the amendment, several members approved of it if *medical* practice only were precluded; but on the assumption that it would be taken as a precedent for the whole country, it was denounced *in toto* on behalf of the holders of small provincial and rural appointments, who formed the majority of the Society, and sanitary service.—Mr. KEITH YOUNG, F.R.I.B.A., next gave a description from a model of a "Cremating Furnace specially designed for the Destruction of Hospital Refuse," which he had, with the assistance of Mr. Brophie and the resident medical officer of Middlesex Hospital, erected at that place, in which advantage was taken of the properties of incandescent perforated fire-bricks and of valves automatically directing the air currents in alternate directions for the complete destruction of the products of combustion. The cost of the apparatus was £150; it was very compact and perfectly free from smell.—Dr. SERGEANT considered it too complex, and maintained that where the work to be done did not require one of the size of Fryer's destructor, it might be efficiently performed by a simple reverberating furnace such as was employed at Sheffield and Blackburn.—Mr. ROGERSON, M.R.C.V.S., then, at the invitation of Dr. Sykes, made some remarks on Influenza in Horses, as observed by him in the stables of the Midland Railway Company at St. Pancras.

MANCHESTER PATHOLOGICAL SOCIETY.

A MEETING of this Society was held on May 13th, the President, Mr. G. A. Wright, F.R.C.S., in the chair.

Ununited Fracture of the Tibia in a Child.—Mr. F. A. SOUTHAM showed a specimen of ununited fracture of the tibia and fibula from a boy aged six years. When two years old "the bones had been broken" for the correction of a deformity due to bowing of the leg. The fracture was not, however, repaired, and, though another operation was afterwards performed, it remained ununited. Four years subsequently, when he came under Mr. Southam's care, there was wasting and marked shortening of the leg, with complete absence of union at the junction of the middle and lower thirds. Two osteo-plastic operations were performed at an interval of six months, bone-grafts, taken first from the femur of a rabbit and afterwards from the foot of a healthy child, being inserted between the ends of the tibia. No unison resulting, the leg was amputated, as it was quite useless. Examination of the bones after removal showed mere fibrous union; the grafts had disappeared, and there was no attempt at new formation of osseous tissue. Attention was directed to the rare occurrence of non-union after fracture in children, and also to the unsuccessful results of operative interference when this defect is met with at an early period of life, reference being made to the observations of Sir James Paget on this subject in his recent work, entitled "Studies of Old Case-Books."—Mr. G. H. BROADBENT asked what had been done with the periosteum, whether it had been left on the grafted bone or had been detached, and suggested that it might be advisable to retain a large portion of it, even allowing it to project over the edges so as to allow of it being sutured to each end of the periosteum of the part operated upon, so as to encourage the formation of bone.

Acromegaly.—Dr. BURY exhibited a Brain and Thyroid Gland taken from the body of a woman aged twenty-three years. She had lost strength and suffered from severe headache for three years, and eighteen months before death her sight began to fail. When admitted, under Dr. Ross, the following symptoms were observed: Great prominence of the orbital arches; a low retreating forehead; enlargement of the nose, lips, tongue, and body of the lower jaw; the voice low-pitched and monotonous, the speech slow and deliberate; the right lobe of the thyroid unduly prominent; the hands, feet, and digits greatly developed, the increase in breadth and thickness being the most marked; kyphosis and slight scoliosis of the cervical and upper dorsal vertebræ; the abdomen enlarged and its walls thickened; the limb muscles soft and flabby, but no paralysis. With the exception of severe headache starting in the left temple, no sensory disturbance. Reflexes normal; taste, smell, and hearing unaffected. The left eye nearly blind, temporal hemianopsia of the right eye. Sugar in the urine, and death from coma. At the necropsy a large pulpy tumour at the base of the brain excavating the sella turcica and extending from the optic chiasma (which with the optic tracts was much compressed) to the cerebellum. Microscopically, it had the appearance of a glioma. Each

lobe of the thyroid was enlarged and contained a cyst. Some pendant masses of tissue attached to the front of the pericardium, similar to pieces of a persistent thymus, showed only fat cells under the microscope. The heart and the liver were enlarged. The uterus was infantile; there were small cysts in each ovary.—Dr. BURY reviewed the clinical history and morbid anatomy of acromegaly, and discussed its affinities. It is noteworthy that in both acromegaly and cretinism the thyroid gland is either diseased or atrophied. Persistence of the thymus, hypertrophy or a neoplasm of the pituitary body, are less constant features of acromegaly. Nevertheless, it is a significant fact that the anterior lobe or glandular portion of the pituitary body originally develops from the mouth cavity; and that in acromegaly the posterior part of the mouth—viz., the palate, the tonsils, and uvula—is usually increased in size. —Dr. HUTTON expressed the opinion that it was impossible to distinguish between the symptoms due to the disease itself and those dependent upon the cerebral tumour; and that, in the absence of any post-mortem examination of the bones, it was not safe to conclude that the case was purely one of acromegaly.

Extensive Ulceration of the Leg.—Mr. A. W. HARE exhibited a specimen of Ulceration of the Leg which had persisted for twenty-six years, ultimately attacking the bones and giving rise to spontaneous fracture. Microscopic examination of the floor of the ulcer showed that it was the seat of epitheliomatous change.—Mr. G. H. BROADBENT asked what was Mr. Hare's experience in reference to the popular belief that the healing of long-standing ulcers was liable to be followed by serious results. From his own observations he believed that there were good grounds for such popular beliefs. He was not inclined to agree with Mr. Hare that the great increase of weight which the patient had gained since the operation was altogether a favourable sign, and he would like the subsequent history of the case brought before the Society at some future time.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on April 9th, Mr. W. Dale James, M.R.C.S., President, in the chair.

Cross Paralysis.—Dr. PORTER showed a brain from a patient who had been under his care at the infirmary with cross paralysis. There was a small tumour in the left half of the pons, the nature of which had not then been investigated. The patient, a man aged forty, was admitted with right hemiplegia and paralysis of the left side of the face and internal strabismus of the left eye. There was never any contraction of the pupils. There was no anæsthesia and no affection of the fifth. The knee-jerks were exaggerated on both sides, but especially so on the right, and ankle-clonus was very marked in the right foot. The speech was slurred, and latterly the tongue inclined slightly to the right on protrusion. There was a family history of both cancer and tubercle. No syphilitic history. The diagnosis was lesion of the pons. The patient died comatose seven weeks after admission and about four months from the commencement of the symptoms.

Mammary Tumour.—Dr. MARTIN related a case of mammary tumour which he had removed. He had first seen the case three years before, when there was retraction of the nipple and some puckering of the skin. The patient was aged fifty, and delay was then advised by his colleagues. When she again presented herself in February last there was a well-marked tumour, which he removed. It was apparently scirrhus, but there was no involvement of glands, no cachexia, or loss of flesh.

Eye Disease.—Mr. SNELL introduced a man who had sustained a blow on the face some months ago with a shovel. The malar margin of the orbit was driven in, and the anterior chamber of the eye was filled with blood. When the hæmorrhage had cleared away it was seen that the lens was cataractous and dislocated into the vitreous, the greater part of the iris being also carried away. The orbital margin was irregular at its outer part in consequence of the fracture. Mr. Snell also showed a young woman aged twenty-one, a file-cutter, in whom symptoms of headache and sickness dated back some months, and in whom there was palsy of the external rectus of two weeks' duration. There was well-marked papillitis in both eyes, but vision was normal. Mr. Snell discussed the connexion of plumbism with the condition found in the patient. In her trade she had been exposed to the deleterious influences of lead, and though there was an absence of some symptoms, a blue line on the gums was evident. Much in her case suggested migraine, and she came from a neurotic family.—Dr. White and Dr. Burgess made remarks on the case.—Mr. WIGHTMAN showed sections of three eyes mounted in glycerine jelly, each containing a glioma growing from the choroid. In one case, that of a child aged two, in whom the tumour had been noticed only about a month or so before it was removed, a very long section of the optic nerve was made, the nerve being divided about half an inch from the globe. A microscopic section of the nerve showed a large number of scattered small round cells very much like the cells found in the tumour.

Obscure Skin Eruption.—Dr. SIDNEY ROBERTS showed a case of skin eruption, in which the diagnosis lay between a tubercular and a syphilitic origin. He intended trying the effect of an injection of tuberculin with a view to diagnosis.

Circumcision. — Mr. ARTHUR JACKSON read a paper entitled "A Few Notes on Foreskins," calling attention to the ancient origin of the operation of circumcision, its sanitary object, and the evil results of its being given up. He attributed the frequency of hip-joint disease, of affections of the spinal cord, of hernia, of epilepsy in young subjects, to the neglect of the condition of the prepuce, and adhesions of the labia minora in female children, and urged more frequent attention to these parts in long-continued diseases.

Obstetric Notes and Queries.—Dr. MARTIN read a paper thus entitled, in which he discussed in the first place the question of early manipulative interference in cases of lingering abortion; next, the question of the early application of the forceps in cases of labour in which there was full dilatation of the os, strong labour pains, and no progress for several hours; finally, the question as to the length of time the patient ought to be kept in the recumbent position after delivery. With regard to the first question, he was of opinion that there existed too great a tendency in the present day to interfere, and that such interference ought not to be undertaken too lightly. He believed that manipulative interference of any kind was attended by possibilities of no small danger to the patient, and that the risks should be thoroughly considered and explained to the patient's relatives before anything was done. The early application of the forceps in the second condition, and under the circumstances described, he regarded as a measure for conserving the patient's strength and securing a favourable convalescence. In reference to the third point raised, he believed that prolonged rest in the recumbent posture favoured complete involution, and advocated a period of at least three weeks in that position, and the exercise of caution for a further period of ten days or two weeks.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on April 15th, Mr. C. Haydon White, M.R.C.S., President, in the chair.

The Treatment of Cancer from the General Practitioner's Point of View.—Dr. LOWE, the writer of the paper, dwelt upon the importance and interest of this disease to general practitioners as distinguished from consultants, specialists, and hospital surgeons, as the former dealt with it in its earliest as well as its latest stages, whereas the latter met with it only for the most part when fully developed. He urged the importance of more fully and precisely recording the details of each case in the certificate of death for the information of the Registrar-General. He also insisted upon the duty of general practitioners to obtain early treatment either in hospital or private, according to the status of their patients, at the same time advising the avoidance of over-zealous surgical and medical treatment, so as to interfere as little as possible with the patients' general comfort and utility.—Dr. BROOKHOUSE expressed a distrust of specialists in the treatment of such diseases as cancer, and a disbelief in the bacterial origin of the disease.—Mr. WOOD gave an unfavourable opinion of operative treatment, based upon twenty years' experience.—Dr. RANSOM stated that coccidia described as peculiar to cancers were discoverable in almost all epithelial growths.—Dr. BOOBBYER dis-

cussed the somewhat startling cancer statistics published by the Registrar-General in his annual report for 1889, which, with all possible allowance for error, went to show an undoubted recent increase in the prevalence of malignant growths.

Extensive Disease of Viscera.—Dr. BROOKHOUSE showed the Heart, Spleen, Kidneys, and Bladder removed from a man aged about fifty, admitted under his care into the General Hospital for retention of urine. Three weeks previously he had a "stroke," suddenly falling back and becoming unconscious. When admitted he was aphasic, and there was some loss of power on the right side, frequent desire to micturate but inability, pain in back, urine foul, alkaline, sp. gr. 1010, with deposit of pus and phosphates. He died exhausted about twenty-four days after admission. At the necropsy there was found wasting of the brain cortex in the Rolandic area, the brain vessels being soft and somewhat atheromatous; heart wall of left ventricle thin, vegetations upon mitral valve; large infarct in spleen; pyonephrosis of right kidney, cortex wasted; there was a black irregular-shaped stone, with rough surface, the size of a nutmeg, in the pelvis, which was much hypertrophied, as also the ureter; the left kidney had dots of pus studded all over the cortex, and the capsule was rather adherent; the bladder wall was enormously thickened, the cavity small, the mucous membrane congested and blood-stained; prostate uniformly enlarged.

A meeting was held on May 6th, Mr. C. Haydon White, President, in the chair.

Double Empyema.—Dr. HANDFORD showed a boy, aged seven years and a half, who after a three weeks' illness was found to have pus in each pleural cavity. On the left dulness reached to the fourth rib, and on the right to the fifth, and behind on each side to the middle of the scapula. The respiration was 56 per minute. On Feb. 13th the left chest was opened under chloroform in the sixth space in the posterior axillary line, three-fourths of an inch of rib being removed. The patient became somewhat cyanosed under the anæsthetic, but the breathing was much relieved by opening the chest, possibly by allowing the mediastinum to bulge over to the left, and thus giving more room to the right lung. Ten days later the right chest was opened in the seventh space below the angle of the scapula, and one inch of rib removed. Many large fibrinous coagula and much pus were removed. Both tubes were finally left out at the end of nine weeks. Three weeks later both wounds were healed by sound cicatrices, and respiration was normal over the whole of both lungs. The boy had gained half a stone since he was weighed on first getting up.

Extensive Ganglionic Swelling.—Mr. ANDERSON showed a man, aged fifty-six, whose right hand and wrist commenced to swell a year ago. There was distension of synovial sheaths of very complex character, involving those of both flexor and extensor tendons, and extending from front to back between the carpal bones. There was undue mobility of the carpus, but no grating. No bare bone could be felt. Various remedies having failed to cure it, amputation was now proposed.—Mr. TRESIDDER showed a similar, but less severe case, in a woman aged seventy-two.

Water-supply in Rural Districts.—Dr. J. S. TEW read a paper on this subject, and referred to the great amount of attention which the water-supplies, especially of large towns, have received both from the general public and also from the medical profession during the last decade, and reviewed the improvements which have been made and which are contemplated in the water-supply of such towns as Manchester, Liverpool, Birmingham, &c., pointing out the benefits derived from such supplies, not only for the towns for which the schemes were specially designed, but also for the country districts around, and through which the conduits pass. The distribution of other local water-supplies was also described, and several recent instances given of the spread of infectious disease by means of drinking water. He also gave an analysis of enteric fever cases personally investigated during the year 1890, which numbered 102, and which gave a proportion of 1 case among 510 persons, an average age of thirteen years and a half of those attacked, a death-rate of 0·36 per 1000 living, and a case mortality of 18·6 per cent. Among these cases, 5 per cent. were without reasonable doubt traced to specially polluted water, while in from 20 to 25 per cent. the water was either of inferior quality, or was liable to pollution. The subject of the lowering of the ground water, as measured by the neighbouring surface wells, in relation to the autumnal prevalence of enteric fever, was also entered into at some length, and the ground water theory of the spread of this fever was upheld. A chart for the year 1890 showed that two-thirds of the cases of enteric fever occurred in the months of August, September, October, and November, and a tabular collection of cases distributed over five years showed that 189 occurred in those months out of a total of 341 cases. It was also considered that in most of those cases where epidemics of enteric fever appeared, while the ground water was rising, other more potent factors were agents in its production—usually drinking water directly polluted by sewage or personal contact,—and it was urged that in investigations into the causes of this fever the water-supply and drainage should receive primary attention, but that inquiries into the fruit, vegetable, and meat supplies were also of increasing importance.—The PRESIDENT and Mr. WILLS discussed the subject.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

A MEETING of the section of Pathology was held on May 8th, Dr. E. H. BENNETT, President, in the chair.

Epithelial Tumour of Neck.—Dr. GRAVES showed a rare tumour of the neck, removed in the City of Dublin Hospital by Mr. Wheeler. It was separable from the skin, and was very hard; it was completely surrounded by a fibrous capsule, which sent trabeculæ in between the masses of horny epithelium of which the tumour was composed. He was unable to give it a name, but he believed, as it had been growing all the patient's life, that it was a fœtal enclosure of epithelium in the cleft of the neck.—Mr. WHEELER, at the request of the President, stated that he had removed the tumour referred to by Dr. Graves last Thursday week from a boy aged twelve years. The tumour was situated in the posterior-superior triangle of the neck on the left side, was very painful, and the history of the case revealed that it was present at birth; it appeared before removal to be an atheromatous tumour, or rather three tumours, for there was a distinct separation, and the skin was invaginated into the divisions. After removal the specimen was handed to Dr. Graves, the pathologist of the hospital.—Drs. M'WEENEY and BEWLEY also spoke.

Polyserositis with Moist Gangrene of Lower Limbs, and Septic Infarcts in Kidneys and Spleen.—Dr. M. A. BOYD exhibited the heart, kidneys, liver, spleen, and also portion of arteries and veins of lower extremities of a patient under his care in the Mater Misericordiæ Hospital, who died from general dropsy with moist gangrene of lower limbs. The dropsy was due to adhering pericardium, the result of pericarditis a year previously, and for which paracentesis of the pericardium had then been performed successfully. The adhesion was principally confined to the cul-de-sac in the neighbourhood of the right auricle and vena cava. Both lungs were found collapsed and carnified, the right one being intimately adherent to its pleura. There was a large infarct in the spleen, and the kidney was studded over with similar infarcts in its cortex. There were embolic plugging of both femoral arteries and thrombosis of the veins of both lower extremities. The peritoneum exhibited evidences of septic inflammation. The microscope showed numerous chains of cocci in the kidney infarcts. The thrombosed and inflamed veins of the enormously swollen lower limbs were regarded as the source of the septic infection of the blood, probably erysipelatous in character. The case was of interest as showing that thrombosis of the veins, no matter how severe, cannot *per se* produce moist gangrene without embolic plugging of the arteries existing at the same time. As there was no evidence of endocarditis or valvular disease to account for the embolic infarcts, they were regarded as due to septic cocci.—Dr. M'WEENEY said he had little to add to the details given about this curious case by Dr. Boyd. The liver was cirrhosed to a most unusual extent in so young a subject. The infection with cocci probably took place during the last few days of life, and was, in his opinion, the cause of the semi-purulent character of the serous effusions. He showed a slide of one of the kidney glomeruli under a $\frac{1}{17}$ oil immersion objective, showing the cocci in pairs and short chains lying between the capillary tuft and Bowman's capsule. There were also cocci in the fibrinous exudation on the pericardium, but in its superficial layer only. The sections were prepared by the Gram method as modified by Weigert, and by Kühne's universal methylene-blue car-

bonate of ammonia method. Dr. M'Weeney showed microscopic slides exhibiting the septic emboli of Dr. Boyd's case.

A meeting of the Medical Section was held on May 22nd, Dr. FINNEY, President, in the chair.

Treatment of Chronic Eczema by Creolin.—Dr. PATTESON read a note on the treatment of chronic eczema by creolin. He had been led to adopt its use from the well-known value of tarry preparations in certain forms of eczema and psoriasis, and from its cheapness, which rendered it suitable for out-patient practice. He briefly referred to two cases of pustular eczema of the scalp—one of eight and the other of three years' standing—in which marked improvement and cure followed its prolonged use. It was applied as a wash or lotion in the proportion of one drachm to eight ounces of water. The value of such a powerful germicide in these cases seemed in favour of Unna's contention as to the parasitic nature of eczema.—The PRESIDENT congratulated the Academy on the additional remedy for chronic eczema which Dr. Patteson had brought under their notice. His communication, however, did more, and that was, that it emphasised the importance of perseverance in the treatment for eczema which had been found temporarily useful.

The Etiology of Cheyne-Stokes Respiration.—Dr. M. A. BOYD read a paper on the etiology of Cheyne-Stokes' respiration, in which he reviewed all the physiological explanations of this phenomenon offered by writers on the subject since Stokes' time to the present day. He particularly pointed out the very rational explanations offered by Traube and Filehene, who regarded the respiratory derangement from the altered nutrition of the respiratory-centre point of view; and of those of the Dublin School, including Hayden and Little, who regarded it primarily from the cardiac point of view, and complimented the Dublin School as offering by far the best evidence, both clinically and pathologically, in explanation of the phenomenon. Having alluded to the marked rhythmical irregularities between the heart pulse and respirations in this affection, Dr. Boyd drew attention to a point which heretofore in the literature of the subject, so far as he was aware, had not been previously alluded to—namely, that the latter portion of the forced respiratory phase of the Cheyne-Stokes' cycle is chiefly an expiratory one, in contrast to the first portion of it, which is an inspiratory one; and that this forced expiration had a most important bearing on the weak ventricles of the heart, by helping them to squeeze the blood on the one side into the pulmonary artery, and on the other into the dilated and inelastic aorta. In proof of this he exhibited sphygmographic tracings showing that it was only during this expiratory portion of the respiration that arterial tension was raised in the arteries, and that this tension continued through the apnœal period following, during which time the respiratory centre was fully supplied with arterial blood and the weak and degenerated left ventricle resting. He regarded the apnœal period, during which time respiration was suspended, as only an effort on the part of the higher automatic centres to rest a heart the ventricle of which is either too feeble to charge an arterial system, the aorta of which may be dilated and inelastic, or the vaso-motor control of which may be defective, and whose own blood supply may be rendered insufficient in consequence, and its nutrition enfeebled. After the intrinsic muscle of the heart has been fed by this increased arterial tension of the expiratory and apnœal periods, forced inspirations begin again, and the heart contractions are stronger, but they fail to fill the dilated aorta, until the forced expirations, by making pressure on the ventricles, come to their aid again. The most typical and pronounced forms of Cheyne-Stokes' respiration were to be met with in alterations of the heart and aorta produced by degeneration and disease. The form of it met with in cerebral disease or injury, and in apoplexy and uræmic coma, without any primary engagement of the heart, he regarded as due to direct interference with the respiratory centre in the medulla, either by pressure or poisoned blood, and the phases of it were never so well marked as in those cases of the affection depending primarily on alterations in the heart. Owing to its dual origin in this way comes the differences of opinion as regards its pathology. As regards its treatment, Dr. Boyd found so much improvement following the inhalation of oxygen in all the cases where disease or degeneration of the heart produced it, that he urged a trial of this remedy in all such cases, and ventured to suggest, from his experience of the remedy, it should be tried not alone in this affection, but in all cases where degeneration of the heart existed from any other cause.

Notices of Books.

The Microbe has his Rights. By GEO. T. CHAPMAN. New York: Wm. R. Jenkins. 1891.—Mr. Chapman is a man with an idea which may or may not be good, and with a specific which he does not, however, tell us much about. He has an idea that in cases of malaria the inhaled microbes (he does not specify what these microbes are) are too numerous, but that in consumption they all find legitimate employment. "In malaria they feed on the material which the stomach and liver have prepared from the food and assorted to nourish the nerves and blood, and so the malarial patient is left somewhat impoverished; hence his lassitude and its attending nerve-wearing annoyances. But in the case of a consumptive we have nearly the opposite condition. The irritation which is occasioned by want of certain materials creates disturbance, and, like all such distress, results in partial congestion; but if the irritation is prolonged a congestion will occur which, if not arrested, creates inflammation, the product of which is pus. As soon as pus appears nature sends a little army of feeding germs to take care of it. The peculiar headache of a malarial patient, which sometimes accompanies this inflammation, is like that caused by prolonged slight hunger." Need we quote more? Is it necessary to make any comment? Three years after finding the "true cause of malaria" the writer discovered his specific; if the specific is anything like his "true cause of malaria," &c.——But this matter must not be taken too seriously, and we refer anyone who wishes an hour's amusement to Mr. Chapman's discussion on the rights of the microbe; he will get some wonderful information and some fine philosophical sentiments. What more can the heart of man desire?

The Barbarity of Circumcision as a Remedy for Congenital Abnormality. By HERBERT SNOW, M.D., Surgeon to the Cancer Hospital. London: J. & A. Churchill. 1890.—We must confess to sympathy with the main contention of this *brochure*, which is that circumcision is a relic of barbarism which has survived in certain races because elevated into a religious rite. Its origin in barbarism is seen by its being practised by many of the least civilised peoples on the face of the globe. But it is the surgical argument which is of most interest, and while we cannot go with Dr. Snow to the extreme to which the zeal of the advocate has led him, we are inclined to endorse most of what he says. The prepuce is not the valueless or mischievous appendage that some would represent it to be, nor is its removal so entirely harmless as some would have us believe. The great fact, however, on which we would lay stress is the rarity of any necessity for circumcision for the relief of congenital phimosis. Non-separation of the prepuce from the glans penis is constantly mistaken for phimosis, and while the latter requires some kind of operative treatment, the former never does in infants and little boys. The forcible retraction of the prepuce (very slight force is really needed), and the daily repetition of this for a short time, brings about in a perfectly harmless and only slightly painful manner a better result than the operation of circumcision effects.

On the Use of the Oil of Eucalyptus Globulus, combined with other Antiseptics, in the Treatment of Scarlet Fever and all Infectious Diseases. By J. BRENDON CURGENVEN, M.R.C.S. London: H. K. Lewis. 1891.—This is a reprint of a paper which was read at the Epidemiological Society, and

published in the Transactions of the Society. The author's aim is to show that by a careful mode of disinfection many of the infectious diseases may be treated in the patient's own homes. He relies mainly upon eucalyptus oil together with thymol and other camphors and aromatic antiseptics. An interesting summary is given of the various plans by which the risks of infection have been hitherto met, and then in some detail the author's system is described, with illustrative cases. The protective influence of the oil of eucalyptus and the other aromatics employed appears to merit serious consideration, although many may think that the sanguine views expressed should be controlled by further experience.

John Kenneth Mackenzie, Medical Missionary to China. By Mrs. BRYSON. London: Hodder and Stoughton.—A young man who, after leaving school at fifteen and becoming a clerk in a business house, has the energy and perseverance to study medicine for the express purpose of becoming a missionary, and to carry out that purpose so thoroughly as to spend the last thirteen years of his short life in China, leaving a name highly honoured not only by missionary friends and grateful patients, but by both European and Chinese officials of high rank, must have had "something in him"—something, too, over and above the "religious enthusiasm" with which missionaries are wont to be credited even by their detractors. Dr. Mackenzie's life is well worth reading. It gives incidentally a good insight into many of the peculiarities of the Chinese character, and it recounts the story of the wonderful way in which, at a time of considerable difficulty and discouragement, the cure of a Chinese viceroy's wife paved the way for the establishment not merely of a hospital, but of a surprisingly efficient medical school. These were of course, in Dr. Mackenzie's view, to be looked upon mainly as answers to prayer and means to the great end for which he gave up his life—that of bringing natives of China to a knowledge of Christ. That he was successful in this as well as in his surgery, of which he did a great deal—several hundred operations in a year,—the pages of the deeply interesting memoir before us are evidence.

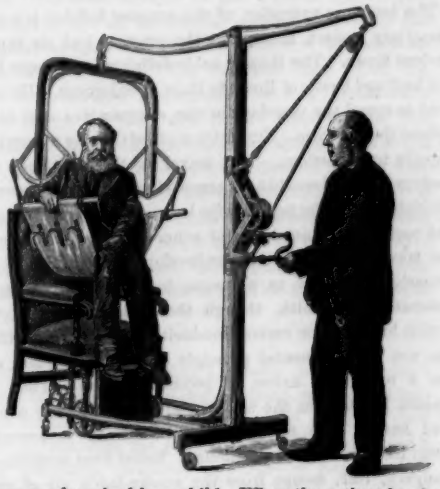
The Elmira Reformatory. By ALEXANDER WINTER, F.S.S. London: Swan Sonnenschein and Co., Paternoster-square. 1891. — For the benefit of any readers who may not be familiar with the system of criminal reclamation employed at Elmira, New York State, we may here note that its essential principle consists in the commutation of an original sentence, no matter what its duration, on reasonable proof that the criminal has learned to appreciate the advantages of order and honest work. As a rule he can, if diligent and well-conducted, earn what is practically release in from one to two years. Then follows a period of six months' "parole" under supervision, then absolute freedom. His dietary during detention, though plain, is good, even too good, for prison fare, and superior to that of many industrious workmen. Meat, bread, milk, tea, coffee, cocoa, and butter are freely allowed, and such luxuries as fruit are not entirely out of reach. The inmates are drilled, schooled, instructed in technical work, in some cases work for a wage by way of training in the duty of self-support, attend lectures, and have access to an excellent library. Finally, on returning to the outer world, they are assured some form of profitable employment. There is no doubt much in this scheme to attract an evil-doer to better courses, though it is certainly open to the suspicion that it may tempt lazy or indigent persons to the commission of crime in order to secure comfortable quarters and good fare. The fundamental idea, which is to obliterate a prisoner's past and to aid and guide his will in shaping life afresh, is certainly a worthy one. The plan pursued, however, is, to our mind, too purely philosophic, too Utopian. It is also noteworthy that religion, though represented by platonic discussions, appears to take no very definite form within the walls of Elmira. We are told, however, that the system has effected something—on an average about 80 per cent. of recoveries from the tendency to crime. If this measure of improvement may be regarded as a permanent condition, the experiment certainly cannot be said to have failed. Its future developments will, in any case, be watched with interest.

Minor Surgery and Bandaging, with an appendix on Venereal Diseases. Arranged in the form of questions and answers. By EDWARD MARTIN, A.M., M.D., Instructor in Operative Surgery, University of Pennsylvania, author of "Essentials of Surgery," &c. Eighty-two Illustrations. London: H. K. Lewis. 1891.—This is very similar to several other manuals of minor surgery. The descriptions are terse and correct, and the illustrations serve their purpose.

New Invention.

IMPROVED BED-LIFT.

WE have had the opportunity of testing this ingenious apparatus, made by the firm of Alderman, Johnson, and Co., 140, Charing-cross-road, with the most satisfactory results. The machine, which is constructed of exceedingly strong and durable materials, consists of an upright bar fixed in a horseshoe-shaped stand, moving on large special castors, and having a long lever at the top. To one end of the lever an iron cradle is attached, as shown in the illustration, and this is raised or depressed by the simple action of an Archimedian screw turning a cog-wheeled roller. It is so easily worked and so powerful that by its aid a very heavy



person can be raised by a child. When the patient has been so raised, the attendant can then wheel him from his bed and place him on a chair or couch, or, if required, from one room to another. The importance of such an apparatus will be at once obvious. The heaviest helpless patient can be raised while either in the sitting posture or lying at full length, and the machine can be adapted to the case of persons recovering from disease attended by want of power in the legs, or to that of patients suffering from, say, typhoid fever, and requiring to be put into a bath without being moved from the prone position.

THE LANCET.

LONDON: SATURDAY, JUNE 20, 1891.

WITH the advent of genuine summer weather the question of holidays becomes a practical one. The increasing tendency of late years among a large and influential section of the community to postpone the holiday season to the end of summer and the beginning of autumn finds its explanation, probably, rather in social reasons than in any natural fitness of things. September is an excellent month for those who prefer continental travel, and October and November are often very charming on our southern coast, but July and August are the real crown of summer, and must remain for large classes, and especially for the young, the natural period for rest, recreation, and change. It is then that sea bathing can be best enjoyed, that yachting presents its maximum of pleasure, and that mountaineering can be pursued with least apprehension of fog. The long day permits the prosecution of out-door occupation to a late hour, and saves the holiday-maker from the *cauni* which is apt to overtake him in the autumnal evening spent in hotel, pension, or lodging-house. Then, while September is on the average one of our finest months, our proportion of warmth and sunshine is such a moderate one that we can ill afford to leave unutilised that which falls to our share in the more strictly summer months.

The immense extension of the summer holiday is a comparatively modern habit, but the practice had its type in ancient times. The Roman noble delighted to remove from the heat and bustle of Rome to Baiæ or Salernum. HORACE used to spend the dog-days in the comparative cool of his upland Sabine farm. TIBERIUS made of Capreæ a resort unhappily too notorious. But travel for the multitude is a modern idea, and would have seemed impossible and absurd in ancient times. The facilities for locomotion were inadequate and costly; the knowledge of other countries was scanty; the travel habit was still undeveloped. The idea of the necessity of travel as a means for the preservation or restoration of health, though the Galenic precept, "in morbis longis solum vertere conducit" shows its recognition, was not a fundamental principle of medical science, still less a recognised axiom of popular opinion. That the modern habit is on the whole a wise and salutary one we need hardly stop to insist, as its utility is generally recognised and seldom questioned. Relief from monotonous drudgery, rest, escape from the smoke-laden air of great cities to the pure breezes of sea or mountain, change of habit, diet, amusement—all these things are involved in a suitable holiday, and it hardly needs demonstration that on the whole they make for health. Nevertheless, it is possible to make too much of a fetish of even a good practice, to ignore its dangers, and to be indifferent to the rules by which it must be regulated if benefit is to result. Travel and change of air are not to be recommended haphazard even for the healthy, still less for the ailing. Experience shows that, while benefit is often obtained, it is not rare to meet with persons who return from a holiday wearied rather than refreshed in body, and mentally exhausted rather than recreated. The most common errors are either to plan a holiday without regard to the individual's peculiar needs and capabilities, or to carry it out with infringements of the general laws of health and common sense. If an individual who pursues a strictly sedentary life for eleven months in the year spends his holiday month in climbing the Alps or the mountains of Norway, in severe rowing or prolonged pedestrian excursions, he need hardly be surprised if he overstrains his soft muscles and flabby heart, and returns worse rather than better for his trip. He must learn that violent physical exercise requires training, and is not to be attempted with impunity by persons unaccustomed to it. Hardly a summer passes without a story reaching us from Switzerland of some elderly gentleman attempting some difficult ascent, and either fatally injuring himself or laying the foundations of permanent organic mischief. Age, it need hardly be said, is an important element in these cases, and the young may attempt with comparative impunity feats that are fraught with the gravest dangers to the middle-aged and elderly. A similar error is that of the man who was a vigorous swimmer in his youth, and who thinks that, after perhaps years of disuse of the practice, he can with impunity attempt great swimming feats in his maturer years. It is now generally recognised that many of the cases of sudden collapse while swimming which are usually reported as "death from cramp" are really due to syncope from cardiac failure.

Errors in diet are another fruitful source of a spoiled holiday. The absolutely eupeptic individual, the man who can eat anything and everything with impunity, is rare; and most of us have at some period in our lives to put ourselves under dietetic rule. It often happens, however, that the man who is a prudent eater at home throws all rules to the winds when upon his holiday. Sometimes, such is the effect of change, fresh air, and unwonted exercise, this ignoring of accustomed rules is followed by no penalty; but this is a result that cannot be reckoned upon. Foreign cookery is frequently made to bear the odium which should rather attach to the indiscretions of the individual. It is no doubt consoling to the tourist who has eaten and drunk more than is good for him, and much more than he would dream of attempting at home, to lay the blame upon "greasy German cookery," or "sour Rhine wine," or "French kickshaws," but the more experienced traveller will know where the real source of the mischief has lain.

To sum up the general principles of travel is not easy, as every case requires its own rules, but certain leading ideas are sufficiently clear. The over-worked and physically exhausted man must remember that rest should be *his* watchword; the man of sedentary habits must realise that he cannot safely adopt the practices of the trained athlete simply by exchanging London for the Alps; the dyspeptic must bear in mind that while on

foreign travel he still carries with him his functional weakness; the man on the wrong side of fifty must lay aside the enterprises of youth.

EARLY last year M. MARIE published in the *Revue de Médecine* an account of a disease somewhat resembling acromegaly, but differing from it in certain important particulars, one of these being its association with disease of the lungs or pleura. He showed the importance of this etiological factor by adding the adjective "pulmonic" to the term "hypertrophic osteo-arthropathy." Early this year M. RAUZIER wrote on the same affection, also in the *Revue de Médecine*; and examples of the disease, more or less clearly marked, have been observed and described by ERB, FRIEDREICH, SAUNDBY, and others, though not placed in a separate group by themselves. Dr. ALBERT LEFEBVRE, a late interne of the Paris hospitals, has just published a very careful monograph on this subject, to which we would refer our readers for fuller details than we can give here, and also for detailed accounts of cases.

The most characteristic feature of the disease is enlargement of the hands and feet. This, however, is not uniform, involving all parts of the hands and feet equally, but is especially marked in the last joints of the fingers and toes. The terminal phalanges become broad and thick, not lengthened, giving to the fingers and toes a curious bulbous appearance. The nails become enlarged laterally, curving round the sides of the finger and over the end, forming segments of spheres; they are also ridged longitudinally, thinner and more flexible than normal. The middle and proximal phalanges are enlarged to a smaller degree, and the metacarpus and metatarsus appear hardly, if at all, affected. But at the wrist the hypertrophy of the bones becomes again very marked, and the lower fourth or third of the forearm assumes the size of the upper third of the forearm. The enlargement affects both the bones, and gradually subsides above. In the lower limb the same changes in the lower part of the tibia and fibula have been found, the malleoli becoming greatly thickened, giving a clumsy appearance to the part. The knees and hips, the elbows and shoulders, may be the seat of a similar osseous enlargement, but it is never so marked as in the more distal parts of the members. The pelvis and shoulder-girdle are little altered, the outer end of the clavicle, and the spine and acromion process of the scapula have been enlarged in some of the cases, and the iliac crest is occasionally a little thickened. Kyphosis of the lower dorsal and lumbar regions may cause a notable deformity of the trunk and some diminution of height. The upper jaw is the only bone of the head and face ever involved, and here the hypertrophy is limited to the alveolar arch. The movement of the affected joints is gradually limited, full extension particularly becoming impossible, the muscular power becomes less, and these impairments of function, added to the great increase in size of the part, make the movements of the hands and feet clumsy. The disease may progress very gradually and evenly, but more often the course is interrupted by acuter exacerbations of the swellings accompanied by pain, followed by subsidence of the swelling and relief from pain. The general symptoms of the disease, if any, are marked by those of the preceding or associated pulmonary disease, such as chronic empyema or pulmonary tuberculosis, and these usually lead to a fatal termination. At present this remarkable disease has been met with only in the male sex. The two affections it most resembles are acromegaly and osteitis deformans. MARIE and LEFEBVRE maintain that it is clearly separated from both of these. They point out that in acromegaly the face and lower jaw are largely involved in the enlargement, while the alveolar arch of the lower jaw is not hypertrophied; that deformity of the spine is constant, abrupt, and seated in the upper dorsal region. In acromegaly there is general and uniform enlargement of the hands and feet, quite unlike the localised hypertrophy of the lower ends of the bones of the leg and forearm, and of the terminal phalanges. In place, too, of the large over-curved nails of pulmonic osteo-arthropathy, those of acromegaly are abnormally small, and almost concealed by the swelled overhanging edges of skin. Osteitis deformans is distinguished by the symmetrical enlargement with curving of the long bones, by the great enlargement of the bones of the head, and by the disease coming on late in life, and almost invariably being associated with malignant disease of the bones.

Pulmonic hypertrophic osteo-arthropathy is limited to the male sex and to patients in adult life. It chiefly comes on after chronic suppurative disease of the lungs or pleura, and while no satisfactory explanation of this has been advanced, the fact is undoubted. Dissection shows that the bony thickening is caused by deposit of firm bone around the pre-existing bone, which is very vascular, as is shown by the large number and size of the vascular foramina on the surface of the bone. The articular cartilages are entirely unaffected. The chief changes in the urine in hypertrophic osteo-arthritis are an increase in organic compounds and of phosphate of magnesia, and a diminution of the phosphate and carbonate of lime. The enlarged bones when submitted to analytical examination show a considerable increase in the fat, and also in the other organic constituents. M. LEFEBVRE has collected eighteen cases of this disease, sixteen of which have been observed on the Continent. Now that attention has been markedly called to it other examples of it will no doubt soon be forthcoming here, and a careful study of a larger number of cases will serve to bring out other clinical and pathological features by which the disease which is the subject of these remarks is to be distinguished.

THERE seems no doubt that a notable increase of cases of suicide is in progress among civilised nations. Comparative statistics are hard to obtain, and are often open to question, but that the present century has witnessed a steadily increasing proclivity to suicide in Europe seems indisputable. A recent writer computes the suicides of Europe at 60,000 annually, and believes that while this number represents the recognised cases of suicide, we should require to double it in order to reach the true figure, and to include secret or unrecognised cases. Germany affords the largest relative proportion of cases, France and England follow next in this order, while Spain, Ireland, and Portugal are very little given to suicide. The Sclavonic race is the least suicidal in Europe. As a general rule, suicide is relatively more

frequent among the civilised and cultured than among the ignorant and barbarous. The list of notable suicides is a long one, and includes men in the very front rank of literature, science, art, politics, and war.

The causes of suicide are numerous and obscure. Probably no question opens up more diverse or more abstruse problems in sociology than the inquiry into the reasons that tend to make men weary of life. Racial idiosyncrasy (itself a very obscure subject, and capable no doubt of further analysis), degree and quality of the civilisation attained, type of intellectual development, religion, the severity of the struggle for existence, disease—all these play their part in determining whether a larger or a smaller proportion of persons of unstable brains will elect "to bear the ills they have" or "fly to others that they know not of." Alcoholism is alleged to be the chief obvious cause of suicide in Northern Europe; but before we can admit this doctrine we should require to investigate the causes of alcoholism itself, to determine how far it is itself a symptom of nervous instability, or an index of misery, over-pressure, or boredom. No error in sociological inquiry has been more widespread or pernicious than the tendency to accept alcoholism as an ultimate fact, requiring no further explanation or analysis, and to trace to the fact of alcoholism all the deplorable evils which follow in its train, without regard to the predisposing causes or the associated conditions. The same hereditary or racial peculiarities that incline one individual to alcoholism *minus* suicide may incline another to alcoholism *plus* suicide.

It is very striking that absolute want and destitution do not seem to be frequent causes of suicide. The abjectly poor and the utterly ignorant do not in any considerable numbers seek to terminate their misery by self-destruction. To incline to suicide there would seem to be required a sharp disparity between either the present and the past social condition of the individual or between his desires and his attainments. The hereditary or chronic pauper, however miserable his state, rarely thinks of violently terminating his sufferings, probably because he has become accustomed to them, or has only a vague realisation of the difference between what is and what might be. On the other hand, the man who has fallen from comfort and social consideration to utter need is in danger, because he vividly realises the contrast between the present and the past. Somewhat parallel is the fact that it is the more intellectually gifted races that are most prone to seek refuge in suicide. The intellectual German or the sprightly Frenchman incline to self-destruction, whereas the phlegmatic Slav has no such inclination. It is in this connexion that the very unwelcome fact of the tendency of education and culture to increase the proclivity to suicide finds its explanation. Education, while immeasurably increasing the usefulness and enlarging the enjoyments of the individual, also multiplies his wants, and if those wants cannot be reasonably satisfied, irritation and unrest ensue, and may predispose to suicide. We must recognise this fact, and it need occasion no surprise. The man whose mind has been expanded by science, art, or letters cannot be satisfied like ignorant Hodge with a hunk of bread and cheese, a pipe, and a quart pot. The former has aspirations which cannot be stifled without danger, and the gratification of which may be beneficial, not only to himself, but to his fellows. The enormous benefit of education is that the new wants which it creates are in the main intellectual, and that their legitimate satisfaction tends to wean the individual from the gratification of the senses. The conclusion to be drawn is, not that the perils of education outweigh or even seriously detract from its advantages, but that as education spreads adequate provision must be made for the satisfaction of those new wants which this spread involves.

We are apt to attribute the growing tendency to suicide to the nervous wear and tear of an age of over-pressure, to the railway, the steamboat, the post, the telegraph. This has become one of the commonplaces of the day, but it is only one side of the question. Suicide is common in stagnant China, whether from religion, misery, boredom, or that weariness with life which seems one of the inevitable concomitants of an ancient civilisation. There is under-pressure as well as over-pressure. Legitimate and normal development is foreign to both.

We have mentioned religion, and no account of suicide would be at all adequate which neglected this essential factor. Every classical scholar knows how profound is the difference between the ancient and the modern mind on this subject, and this difference is due mainly at least to the teachings of Christianity. The ancient Greek and Roman saw nothing wicked, but rather everything meritorious, in voluntarily terminating a life which had been robbed of all happiness and value by domestic, personal, or national calamity. ARISTOTLE, DEMOSTHENES, CATO, SENECA, and HANNIBAL sought refuge in suicide from overwhelming misfortune, and their example, so far from being condemned by heathen writers, was held up to admiration and imitation. Christianity, however, from the first put its darkest stigma on self-murder, and contributed powerfully to the dissemination of that sentiment of horror which now surrounds—probably very salutarily—the subject of suicide.

DURING the past week some important meetings of those interested in the formation of a Teaching University have taken place, and others will immediately follow. The Lord President of the Council has written to King's and University Colleges asking that their case be presented at the Privy Council Office on or before the 22nd inst., and it is reported that he has fixed the 29th inst. for the hearing of counsel. He has also written to the University of London, to the Royal Colleges, and to the other petitioners against the proposed Charter of the Albert University, informing them that if they still desire to be heard in opposition they must also present their case, and, where possible, a joint one, by the 22nd inst. The teaching colleges are known to be ready to go on with their case, and have instructed Mr. RIGBY, Q.C., and Mr. CUNYNGHAME as counsel in their behalf. The Royal Colleges have asked for further time to consider their position, and have been supported in this by the London medical schools; but this demand has been refused by the Lord President. It is, however, likely that a question as to this may be put in the House of Commons before Monday next. The com-

mittee of the Senate of the University of London is stil intent on endeavouring to bring about a closer relation between the University and the Royal Colleges and the medical schools—evidently on the basis of a joint Examining Board for the Pass M.B. degree,—and of associating the teachers in the medical schools in Boards of Studies. We can hardly believe that the Senate will be induced to sanction such a proceeding, although it has the power to do so. The formation of two classes of degrees with different examining boards—one not under the absolute control of the University—will certainly prove distasteful to Convocation, and may lead to another expression of their opinion to that effect. It would merely be a piece of patchwork, and not stop the formation of a Teaching University, although it might for a time hinder its full development on the medical side. As this is the only opposition to a new University with power to grant degrees in Arts and Science, its formation, at any rate in these two Faculties, may be considered as certain. In this case, the Albert University will follow the precedent set by the Victoria University, and, as in the case of this University, powers to grant degrees in Medicine are sure to be asked for, and cannot be long refused. The Royal Colleges as Examining Boards find themselves in the position of being offered seats on the Council of the proposed new University, but without any power in the assemblies of the Faculties. As the promoters of the new University have always insisted that examinations should follow teaching, it is difficult to see how the Faculty of Medicine can embrace representatives of the Royal Colleges without being constituted on a line different from, indeed fundamentally opposed to, that of the Faculties of Arts and Science. Moreover, it is expressly laid down in the Charter that each teacher is to assist, with an external examiner, at the examination of his own students, as at the Scotch Universities and the Victoria University, so that independent examining bodies have no place in the scheme. It is thought by some that the Royal College of Surgeons will decline to take any part in such n University, but the Royal College of Physicians, which has passed resolutions in favour of a Teaching University in London, will hold another comitia to-day (Saturday) before coming to a final decision. This will evidently depend to a great extent on how far the proposed new University will accept the examinations of the Conjoint Board in England in place of its own. A clause in the Charter provides for the acceptance of the examinations of other Universities, but says nothing about the medical corporations. Another important clause makes the degree purely academic and not a licence, but there is some doubt as to whether a self-denying clause like this will be sustained by the Privy Council. The point is obviously of the gravest moment to medical corporations. The medical schools are chiefly concerned as to their relative representation in proportion to the Medical Faculties of King's and University Colleges. At a conference held on Wednesday between the Standing Committee of the Councils of King's and University Colleges and delegates from the other London medical schools, it was definitely stated that, either directly or indirectly, there would be ten places on the Council for the representatives of medicine, and that the Teaching Colleges had no special wish to take part in the decision as to how they should be allocated, as to whether the Royal Colleges should or should not be represented, or as to how the medical schools should be grouped for representation. One-third of the seats on the Council would be given to medical representatives in any case. We think this is a very reasonable offer, and that the London medical schools would under such circumstances be ill-advised in offering opposition to a scheme which holds out fair hope of a remedy for the "medical grievance."

Annotations.

"Ne quid nimis."

THE ELECTION AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE approaching election at the Royal College of Surgeons of England will afford to the Fellows of the College a very favourable opportunity for acquiring an increase in their privileges and a proper influence over the affairs of the institution. At the present time the sole constitutional function of a Fellow is the annual exercise of the right of voting for three out of twenty-four members of the Council, a proportion far too small to be of any kind of check upon the autocratic powers wielded by that irresponsible body. Spontaneously the Fellows of the College are never consulted by the Council at all—they have no manner of control over the expenditure or the policy of the Council,—and when consulted through the exercise of external pressure, they are consulted in association with the Members, who outnumber them by about twelve to one, and very likely at a time when any decision of a combined meeting of Fellows and Members cannot produce any appreciable effect, because the issue has already been settled by the Council of the College. In point of fact, the Fellowship is valuable only as a surgical distinction, which secures a certain amount of professional consideration for those who possess it, and is useful in competition for surgical appointments; and that it is esteemed chiefly on this ground is shown by the apathy which prevails in the constituency in regard to the elections at the College. Not half of the Fellows apply for voting papers, and of those who do a considerable number do not take the trouble to fill them up when they have been obtained. It might be supposed that the Fellows of the College of Surgeons of England would view with concern the low constitutional status of their body, which is one of marked inferiority to that of the Fellows belonging to the other professional colleges in the United Kingdom, where the Fellows are actually or virtually masters of the policy and purse, and that they would give the warmest support to any organised movement in their ranks to raise their position to its proper level. Hitherto, however, the response to the reform movement has been conspicuously disappointing, not so much from real antagonism as from secondary influences which distract the attention of the Fellows from the main issue and lead them to bestow their votes on candidates who may be secretly opposed to any change in the mode of government at the College. This being so, it is often a positive advantage to candidates for seats on the Council not to state their views on current questions, if they possess any, for by their reticence they at once conciliate the support or disarm the opposition of those who are well content with things as they are. These considerations should suffice to prevent the indulgence of any over-sanguine spirit in regard to the issue of the approaching election, and should stimulate all Fellows who desire to

see their body exerting its due influence over the affairs of the College to record their votes in favour of the progressive candidates supported by the Association of Fellows, which has been working with a single eye to the promotion of the interests of the Fellows and the good of the College.

THE ROYAL COLLEGE OF PHYSICIANS.

AN Extraordinary Comitia of the Fellows of the College of Physicians was held on the 16th inst., the President, Sir Andrew Clark, Bart., in the chair. It was announced that Dr. Pye-Smith had been nominated Lumleian lecturer for 1892, and Dr. Sidney Martin, Gulstonian lecturer. A letter from the Secretary for War was read, detailing the points conceded as to relative rank of officers of the Army Medical Department. The President pointed out that all the matters urged by him had been gained except the formation of a Royal Medical Corps. The sanction of the College was obtained to the postponement of the delivery of the Croonian lectures by Dr. Burdon Sanderson to November. On the motion of the Senior Censor, seconded by Dr. Priestley, it was resolved to permit the Council to confer with persons not Fellows of the College respecting the five years' curriculum. The Comitia then proceeded to consider the subject of the proposed new Teaching University of London, and ultimately adjourned to the 20th inst.

THE LAUNDRESS AND HER GRIEVANCES.

THE demand of the laundresses for protection under the Factory and Workshops Act is one that will have to be complied with sooner or later, and the sooner the better. There are no doubt many objections to it. It will cost money, to be paid by the already groaning taxpayer of the country; it will involve an extension of that ever-widening function of the State, the paternal function; and it may be objected with much force that women are already becoming very independent and capable of fighting their own battles. The time is coming, then, when the State may have to care a little less anxiously about women, or, at any rate, when women will be able, without the help of the State, to combine and to organise their labour in such a way as to protect themselves. But we are nevertheless disposed to think that Mr. Matthews cannot long resist the demand to bring laundries and the work of laundresses under the protection of the Factory and Workshop Act. And this for two very simple reasons: First, there seems good reason to believe that women, though becoming more and more indispensable and independent in the labour market, are still not sufficiently so to make it right to deny them some protection, and to give the conditions under which they work some investigation. The nature and the conditions of their work are both special. They have to do a week's work in three or four days, and they have to do kinds of work which involve considerable personal risk. Another equally or more potent reason is that it is of high importance to the public that the work done in laundries should be done faithfully and under proper sanitary conditions. We believe there are many laundries where work is already done under such conditions. These need not fear inspection, and have everything to gain by it. But if half the accounts be true of the close and confined rooms in which laundry work is done, of their drainage or want of drainage, and of the absolute absence of all provisions for treating infected or suspected clothes separately and disinfectively, then it cannot be doubted that in laundry work as done at present we have a fruitful source of ill health to the workers and risk to the public, and an ample case for legislation. All this being admitted, it will be well for washerwomen to know that more depends on themselves than on any special legislation in their behalf. There is ample work for them to do, and they are paid better for doing it than some other classes of workpeople. Clean linen is becoming more and more a note of all self-respecting people. It is a costly element in modern civilisation, and if laundresses are true to themselves they will improve their own status more surely than many classes have succeeded in doing.

CHARGE AGAINST A MEDICAL MAN OF FALSE CERTIFICATION.

SOME members of the profession seem very slow in learning the danger of signing certificates of death in cases where they themselves have not seen the patient, but where the sole attention paid has been given by an unqualified assistant. This kind of case arises week after week, and at every meeting of the General Medical Council. A practitioner was recently prosecuted at the instance of the Registrar-General, and has been judged by the magistrates to have unlawfully and wilfully made a false certificate or declaration under the Births and Deaths Registration Act of 1874. The case had been seen and attended by an unqualified assistant, but not by the practitioner, who yet signed a certificate to the effect that he had attended the child, and it had died of inanition. The solicitor who defended boldly maintained that his client had done nothing wrong. The magistrates considered two statements in the certificate obviously incorrect: that he had attended the child, and that he saw him alive on April 24th, he never having seen him alive. The Bench did not feel justified in imposing a lighter penalty than £3 and costs. We deeply regret that a practitioner of standing should place himself in so wrong a position; but we are glad to see the Registrar-General vindicating the law by taking legal proceedings against those who break it.

EXPERIMENTS ON ANIMALS.

THE return made to the House of Commons by Dr. G. V. Poore, the inspector under the Act 39 and 40 Victoria, has just been issued. The report gives the names of all persons who have held licences or special certificates during the year 1890, and the total number of experiments performed by them. The total number of licensees is 110, of whom thirty-three performed no experiments. There were forty-eight licensing places in thirty-three different institutions in England and Scotland. The return shows that licences and certificates were granted and allowed only upon the recommendation of persons of high scientific standing, and that the licensees were persons who by their training and education were fitted to undertake experimental work and to profit by it. The total number of experiments performed in 1890 was 2102, and they are subdivided in the tables according to the nature of the experiments. Thus there were 920 in which the animal suffered no pain, because complete anæsthesia was maintained from before the commencement of the experiment until the animal was killed. In 857 other experiments the pain was trivial, simply a hypodermic injection or inoculation, it being a condition of the certificate granted in such cases that the animal shall be killed if pain result. In 316 cases the animal was anæsthetised during the operation, but was allowed to recover, care being taken to ensure the painless healing of the wounds by antiseptic dressings. The inspector states that in his visits to the various licensed places he has never seen a single animal which appeared to be in bodily pain. "As regards the nature of the experiments, 765 were physiological, 976 were pathological, and 361 were therapeutical or pharmacological. ..... In the domain of pathology investigations have been made concerning tuberculosis, cancer, diphtheria, pneumonia, tetanus, acute necrosis, malaria, lead poisoning, rabies, dis-

temper, grouse disease, anthrax, 'black quarter,' 'pink eye,' &c. In the department of physiology the questions of animal heat, circulation, respiration, secretion, and the action of the central nervous system have been investigated; while among the therapeutical questions which have been here examined are the action of chloroform, morphia, nicotine, salicylic acid, strophanthus, and many other bodies which are new or less widely known, together with investigations into the protective and other powers of bacteria and ferments." Dr. Poore refers to his appointment in the spring of 1890 to succeed Professor Erichsen in the office of inspector, and the appointment in August of Dr. J. A. Russell of Edinburgh as assistant inspector. Dr. Thornley Stoker furnishes the report for Ireland, where three persons hold licences, and they performed seventy-eight experiments, of which fifty-nine were physiological and nineteen therapeutic.

FINES UNDER THE APOTHECARIES ACT.

THE Apothecaries Act still does good service, if somewhat fitful, in promoting the prosecution and punishment of those who presume to prescribe medicines contrary to the Apothecaries Act. John T. Jackson, of Beaucroft-road, Castleford, and H. J. Horner, of Welbeck-street, Castleford, according to the *Yorkshire Post's* report of the case in the Pontefract County Court, had prescribed for a deputy lodging-house keeper, diagnosing his ailment to be Russian influenza. Mr. Ward appeared for the Apothecaries' Company. The offence was admitted. His Honour said he had no power to mitigate the fine, and gave a judgment of £20 and costs.

THE MEDICO-MILITARY HISTORY OF JAMAICA.

WE doubt whether any more striking illustration of what can be effected by the application of sanitary principles could be adduced than that which Brigade-Surgeon S. E. Maunsell has set forth in a late contribution of a very elaborate kind to the medico-military history of Jamaica. Time was when the amount of sickness and mortality among the European troops was so excessive as to seem almost incredible. Contrasted with the present state of things it is difficult to realise that the stations in the island, as they are now known to us, could have been the scenes year after year of such high rates of sickness and mortality. What was ignorantly attributed to climate—such as severe fevers and other zymotic diseases—was in reality due to neglect, not of one, but of all of those laws which are now recognised as indispensable to health, especially in hot climates. The barracks were bad in construction, foul, dirty, unventilated, and overcrowded to an extent calculated to raise the eyebrows of astonishment, as the Germans say. The night soil was collected in large open cesspits, which were seldom emptied; there was no accommodation provided for the troops in the hills, the clothing was quite unsuitable for the climate, no attention was given to the water-supply, and the food was bad and mainly consisted of salt rations. Where there was a complete disregard arising out of total ignorance of the laws of life, it is needless to add that there was a neglect of all personal hygiene, and intemperate habits were the rule instead of the exception. Much of the intemperance was no doubt attributable to the poisoned atmosphere in which the men lived, the fear engendered by the great sickness and mortality, and the *ennui* of their lives. Brigade-Surgeon Maunsell, who has looked as far back as the records of 1655, says that sometimes our countrymen died at an average rate of 140 a week, and that, in some years later, out of 800 who arrived two-thirds died in a fortnight. From 1817 to 1836 the statistics show that every man in the force was twice in hospital annually; that 121 out of every 1000 died annually; that of these deaths no less than 101·9 were caused by fever, and 20 from other causes. It is stated that in Tobago, where the barracks were the best in the whole command, the men had only 250 cubic feet per man; that they slept in hammocks packed as closely as possible; and that each man had a space of only 22–23 inches in breadth, whereas now the European troops get 800 cubic and 75 superficial feet per man at Newcastle, while at Port Royal they get 1000 cubic feet and 80 superficial feet per man. We have not the space to allude to the succession of epidemics which have visited Jamaica and the West India commands since our occupation of these stations. Yellow fever and fevers generally, cholera, and dysentery were the chief diseases. The medical history of our troops in the West Indies, is it not written in the printed reports of the late Deputy Inspector-General Marshall and Captain Tulloch, and in those of the late Surgeon-General Balfour? During the twenty years before 1836 the fever mortality averaged, as we have said, 101·9 per 1000; during the ten years ending 1889 the mortality from all causes was only 11·36 per 1000, and for fevers 4·30 per 1000 in Jamaica; and in 1889 it was 8 per 1000, and for fevers *nil*. Brigade-Surgeon Maunsell may well say that these results teach in unmistakable language how largely the fate of man is in his own hands. The very class of diseases which were formerly so fatal and occasioned the highest rate of mortality, both absolute and relative, is that which seems most dependent upon removable conditions and habits.

A NEW NURSING SCHEME.

THE committee of the Queen's Hospital, Birmingham, are about to inaugurate a department for the training and supply of nurses which, if successful, will open a fresh field for enterprise to the existing hospital system. It is proposed—and the sanction of the governors has just been obtained to the proposal—to establish an external nursing department, the training being given in the hospital to probationers during the first two years. At the end of this period they will be entitled to a certificate stating the bearer to be fully versed in the ordinary practice of the nurses' art. When this is obtained, such of them as remain, and are willing, will continue under the management of a separate committee, and act as staff nurses, or will be sent out as private nurses at fixed charges, according to experience and requirements, the surplus being added to the funds of the hospital. By this means it is hoped that better nurses will be obtained for the hospital, more employment will be found for the nurses themselves, and more popularity accrue to the hospital from a public point of view. The demand for nurses having outgrown the supply from present sources, the committee look forward with confidence to the movement being successful. As an insurance against possible failure, a guarantee fund amounting to £500 has been raised, and it now remains for the experiment to be brought into working form, and for the test of time as to the result.

THE FLORENTINE "GUARDIA MEDICO-CHIRURGICA."

THE time-honoured brotherhood of the Misericordia is not the only medical charity of Tuscany or its capital. The institution known as the "Medico-Chirurgical Guards," to which we drew attention at its initiation some months ago, is another example which Florence sets to her Italian sisters. Its object, it will be remembered, is, by day and night, to render surgical, obstetrical, and medical aid to those of the less favoured classes who are too poor to pay a professional fee. It has its headquarters and its outposts where consultations are given, operations performed, and medicines dispensed, on every application—these services being rendered gratuitously by able and skilled

practitioners, assisted by advanced students, who mount guard at headquarters or outpost by turns, relieving each other from time to time in awaiting calls or responding to them. The Commendatore Egisto Fabri, a munificent promoter and subsidiser of medical study in Florence, supplied the funds, the accommodation, and the materials necessary for the start, and after seven months of life the institution has rendered an account of itself in a *Bollettino* just issued. The editors, Drs. Bacci, Signorini, and Roster, after an introduction setting forth the constitution and regulations of the "Guardia," give a detailed narrative of the visits paid at the houses of the patients, and of the maladies or lesions taken in hand, of the surgical operations performed, and of the consultations held at headquarters. From May 20th to Dec. 31st, 1890, the assistance rendered at patients' houses included 325 cases; that in the headquarters and outposts, 131; while the consultations amounted to 1397. In medicine proper the consultations numbered 161; in surgery, 132; in ophthalmic diseases, 531; in gynæcology and midwifery, 118; in neuropathology, 41; in electrotherapy, 23; in syphilis, 61; in dermopathy, 23; in aural disease, 122; and in pædiatry, 78. As for the medical or surgical service vouchsafed at the patients' homes, or on the premises of the "Guardia," the *Bollettino* says: "During the months of May, June, &c., up to December, we attended, in response to appeals *di urgenza*, 466 patients—310 males and 156 females,—136 being received at our premises, and there cured or relieved; while in 305 cases we repaired to the remoter quarters of the city, conveying all the apparatus, medicaments and comforts most urgently required—not only so, but in 25 cases we extended our journey beyond the city walls, especially where the absence of medical practitioners during the night is most keenly felt." This is a most gratifying result, and the first campaign of the "Guardia," and there is every prospect of a still more gratifying "report of progress" in the current year. Comparing the first four months of 1891 with the last of 1890, the records of the "Guardia" show an increase of 138 in the consultations, while the medical or surgical assistance rendered at headquarters was augmented by 84, and that rendered at the patients' homes by 112. So sensible are the Florentines of the blessing conferred on their city by this noble army of medical volunteers, that private munificence now goes hand-in-hand with municipal largess in promoting by every means—by money or gifts in kind—the efficiency of the institution.

LITERATURE FOR THE BLIND.

MUCH has been done in recent years to ameliorate the condition of the blind, and in no respect, perhaps, does the problem of their education better or more easily yield to solution than in that of teaching them to read by means of raised characters. But although the means of bringing literature within their reach have long been available, the bulk and cost of books intended for their use have greatly militated against their production in large numbers, and have in point of fact kept down the library of the blind to a comparatively small number of volumes. To supply in some measure this defect a monthly magazine has been produced under the title of *Santa Lucia* since March, 1889, which is printed in Braille type, and deals in magazine fashion with current topics. The magazine is, as we understand, produced by the domestic industry of some ladies at Richmond, and supported by the literary contributions of a very competent staff of writers, who for the most part give their work free of charge. Thus written and printed, it comes upon the market at a minimum of cost, and is sold at two shillings a copy—a price which should ensure its wide circulation, and enable many to whom the ordinary means of reading are denied to find amusement and instruction in its pages. To those of our readers who are interested in the blind and their relief we commend this kindly and useful enterprise as a matter well worthy of support. The magazine is published by the Misses Hodgkin, of Childwall, Richmond-on-Thames.

DAMP BEDS.

THE mischief wrought by damp beds unfortunately does not usually react upon its heedless originators. The sole sufferer is the luckless occupant, who, forgetful of the buyer's *caveat* and all that it implies, buries himself within the chill of the half-dried bedclothes. In a recent instance, in which the law was appealed to, the tables were turned. The plaintiff, who, with his family, had for several days occupied a room in a seaside restaurant, was then told that the apartment was let, and he must accept another. Here the trouble began. Illness, with its expenses, followed, and the final cost incurred in consequence by his too unceremonious host amounted to £150. An action so unusual and a verdict so consonant with sanitary principles deserve to be kept in remembrance. It is to be hoped that their obvious teaching will not be forgotten by any who live by housing their fellow men. As regards the latter, however, the maxim which inculcates prevention is still the best. Not even a money fine will always atone for the injury done by avoidable illness. *Caveat emptor*, therefore, notwithstanding. Let the traveller, however weary and inclined to sleep, first be careful that his bed is dry. In any case of doubt the use of an efficient warming-pan, or, if needful, even a change of bedding, should be insisted on, and the further precaution of sleeping between blankets rather than sheets is in such cases only rational.

HOSPITAL STATISTICS.

THE letter from Mr. C. Knox Bond, which appears to-day in our correspondence columns, relates to a matter which stands probably much in need of discussion. He points out that the mortality of hospitals is, as matters stand, recorded with much diversity in the methods adopted at various institutions for dealing with the facts. The method which our correspondent favours is that of ascertaining the mortality as a percentage upon the mean number of cases under treatment. Thus, if more cases are admitted during a given year than pass out by discharge and death, taken together, so that the number remaining in hospital under treatment is greater at the end of the year than at its beginning, he includes in his figures only one-half of the added number in his total; and, similarly, if the number of patients has been reduced during the year, he corrects his total by deducting from it a number equal to one-half of the number so lost. Now, for the purpose of producing a serial record, this method has great and manifest advantages. It produces no doubt a slight error in the percentage of every several year, unless it happens that the admissions have been exactly equal in number to the exits; in which case there would, of course, be no adjustment of the figures. In any other case—that is to say, if the number remaining in hospital at the end of the year is either greater or less than the number remaining over at its commencement from the preceding year, the correction produces, as we say, a slight error in the resulting figures, because the mean number assumed in the calculation is not the number actually coming under treatment. But these errors are not cumulative. On the contrary, the same conditions which cause the error to be an error in excess in one year will cause it to be an error in deficit in the next year; and therefore when a series of years is taken the errors tend to cancel one another, and rectify the record.

The percentages may all be wrong, but their average will be right. This merit is, however, purchased at the cost of detailed accuracy, since any given year is, as we have pointed out, caused by this method to yield a more or less inexact result. But, on the other hand, a special difficulty besets the attempt to deal rigorously with the figures of a particular year; because, although the figures may lend themselves to rigorous treatment, the facts will not. It is, for instance, easy to say that cases remaining under treatment from a previous year shall be treated as admissions. But they are not admissions in point of fact, and they comprise, and necessarily, a certain proportion of convalescent cases which would not be proper subjects for admission. Again, the cases remaining to the next year cannot properly be distributed under the heads of discharged and dead, nor can they properly be passed without distribution into either of these classes. It is plain, therefore, that an accurate statement of mortality can only be arrived at by shutting out both these groups of patients and confining the examination to those cases which began and ended their stay in hospital within the year. Mortality percentages founded upon such a treatment of the materials, though irreppoachably accurate so far as they went, would obviously leave a part, and in some cases a large part, of the hospital work wholly untouched; and they would therefore present a view of the whole as inadequate as the other was incorrect. The truth seems to be that no possible way of exhibiting hospital statistics is equally suited to every purpose for which such records are compiled and consulted. The method recommended by our correspondent is probably as generally useful as any that can be suggested, but we incline to think that the more excellent way is to keep it exclusively for the compilation of figures intended to represent the work of considerable periods of time, and to adopt for the examination of the statistics of single years some more rigorous method, even though the more rigorous method deals only with a part of the available materials.

CALCUTTA SANITATION.

MR. BALDWIN LATHAM has submitted a very important and exhaustive report on the drainage system of Calcutta to the chairman of the Corporation of that city. It would be impossible, within the limits of space at our disposal, to touch on all the points discussed by Mr. Baldwin Latham. While he recognises that the sewerage works are kept in as good a state as could be expected, he says these works are placed under a disability owing to defects in their original design. Mr. Baldwin Latham was particularly struck with what he himself observed as to the number of men engaged in removing deposit from the sewers, and with the facts he gleaned from the engineer's annual report. These demonstrate that the sewers of Calcutta at the present time are not self-cleansing, and that solids have to be collected and removed from the sewers which should either be carried off by the ordinary flushing arrangements or should never have been permitted to enter the sewers. The present pumping machinery is barely sufficient to deal with the dry weather flow of the sewage, and quite inadequate to deal with storm or the present flush water. All the inverts of the sewers of varying characters at the point of juncture have been made level or nearly level, so that when the sewage ceases to run parallel with the invert of the sewer the velocity and discharge of the sewers are greatly retarded. This error in design was pointed out to the Calcutta authorities at the time the drainage was about to be constructed. With reference to the large sewers of Calcutta, Mr. Baldwin Latham is of opinion that they can best be treated by a system of sectional flushing; or a series of flushing gates should be introduced into them, and the flush water and sewage dammed up, the gates being then opened from below upwards in regular succession. The minor sewers require additional flushing power. Flushing tanks should be constructed at the head of every sewer and at such other points as experience indicates. Mr. Baldwin Latham, in his report, deals with the surface drainage, the disposal of storm water, the construction of additional sewers, the remodelling of the present pumping station and provision of additional machinery in connexion with the introduction of drainage works into the amalgamated area, and the inclusion of certain districts around Calcutta in the system of water and sewerage arrangements provided for the city. He concludes by a reference to the health statistics of Calcutta and to the carefully prepared and exhaustive reports of Dr. Simpson, from which it appears that while enormous benefit to health has accrued from the supply of good water to the city, but little improvement seems to have followed the construction of the works of sewerage. After inspecting these works, Mr. Baldwin Latham declares that he should have been surprised if any sanitary advantage could have arisen from them; but he is as emphatically of opinion that with a proper system of drainage in Calcutta, and with the remedy of the defects he has pointed out, as good results to health would be obtained in Calcutta as have followed in any other town that has been efficiently drained.

THE SALE OF POISONS BY UNQUALIFIED PERSONS.

THE crusade against the employment of unqualified assistants by the so-called drug companies is to be credited with a decisive victory. At the instance of the Council of the Pharmaceutical Society of Great Britain four unqualified assistants have been sued to recover penalties incurred by selling laudanum, contrary to the provisions of the Pharmacy Act, 1868. This Act provides for a fixed penalty of £5 for every such offence, and it was not disputed that the defendants, though unqualified persons, had sold poisons on various dates. An appeal for mercy was not entertained, the judge holding that the employers ought to pay the penalties, since it was clearly, by the requirements of the Pharmacy Act, intended to safeguard the public against the employment of "cheap servants." The penalties, for which judgment was given, amounted in all to £40, with costs. It was explained, in the course of the proceedings, that the drug companies employed a properly qualified chemist to manage the shop, but that when the sales were made the qualified manager was unfortunately away. A few such prosecutions and judgments ought to do much to diminish the dangers of drug stores, and to check the employment of the unqualified assistant.

THE ARTIFICIAL PRODUCTION OF DENTAL CARIES.

FOR the past year Mr. Sewill, following other experimenters in the same field, has been endeavouring to produce caries in extracted teeth; and certainly the microscopical appearances presented by the sections shown at the Odontological Society differed but little from those of natural caries. He found that the best mixture of organic substances for the purpose was one part of bread to eight of saliva. Meat with saliva remained alkaline, and if a small quantity of acid were added became again rapidly alkaline. Albumen, whether as white of *egg* or other forms, acted in the same way. Saliva and starch produced little acid, which was soon exhausted. The teeth were immersed in the mixture in glass-stoppered bottles, and kept at a temperature of about 35° to 37° C. The bottles were unstoppered about once a day for examination; this, of course, admitted air, and if the mixture became putrid, it at once showed

an alkaline reaction, in which case the teeth were taken out, well washed, and the mixture renewed. The mixture became rapidly acid, and remained so (unless putrefaction to a large degree supervened) for from three to five weeks. The acids present were acetic and lactic; of the former 5 per cent. and of the latter 0·5 per cent. were found after three weeks. The effects upon the tissues were precisely the same, both macroscopical and microscopical, as in natural caries. As in natural caries, the decay was found to commence most readily in places where there was ill-formed enamel or flaws or fissures which allowed access to the dentine, in which tissue the caries progressed more rapidly than in enamel. Cementum resisted longer than enamel, but at length yielded, and allowed the dentine beneath to be invaded. Discolouration was often present, and it was found that carious dentine readily took up stains from such substances as are often admitted to the mouth in medicines or articles of food. Microscopically the translucent zone is well shown, also the "pipe-stems" appearance in transverse sections, and the dentinal tubes are filled with micro-organisms, just as in natural caries. The conclusions that Mr. Sewill draws from these experiments, and from the facts that caries takes place in natural teeth which are used as artificial substitutes, are, that caries is entirely due to external agents, and that vital action in no way modifies the disease.

THE LONDON POLICE-COURT MISSION.

IF words must be used to commend the purpose and the practice carried on by such agencies as the London Police-court Mission, they need not be many. A brief recital of the work accomplished by this Association—a branch, be it known, of the Church of England Temperance Society—ought to satisfy all candid persons that its claims to their support are based on no mere sentimentalism, but on grounds of solid principle and on evidence of past success. That work is manifold in its applications. It is at all times a work of rescue and prevention, and we may add of education also, since, by ever holding open a door of hope, it teaches the outcast and criminal the possibility, the duty, and advantage of healthy moral life. Its agents meet the time-expired men on their exit from prison, find them work, and help them to reform. The Mission rescues boys in like manner, if possible before conviction and imprisonment have begun their hardening work—a point the importance of which can hardly be over-estimated. It provides occupation and sometimes a home for these and for outcast women; it encourages the spirit of self help, and in every possible way seeks to arrest and to cure the moral ravages of vice and of crime. Not the least useful of its efforts is that illustrated in its "cottage system" of treating habitual inebriates, a method of which the remedial value is already generally admitted. These few details will suffice to indicate the scope of an undertaking which is described with far more interesting fulness in the annual report just published by the Society, but which, as we have already said, need only be sketched in outline in order to exhibit its justly close relation to what is best in public charity.

DIRECT REPRESENTATIVES ON THE GENERAL MEDICAL COUNCIL.

BEFORE the last Session of the General Medical Council passes from memory, and before the turmoil of new elections occurs, there is a short breathing-space in which it is convenient to review the position and work of the direct representatives. It cannot be said that their labours have been always warmly welcomed by those with whom they have been associated; still, it has been gratifying to note that they have not allowed themselves to be overawed or silenced by their new surroundings, or even by an occasional reminder of their inexperience, a factor which has less weight with every successive session of the General Medical Council. The direct representatives appear to have felt called upon to justify their existence, and although their recommendations have not invariably met with the cordial approval of their colleagues, it has been impossible not to trace the influence of a new element in the course of the debates. That their work has been largely appreciated by the profession is shown by the following resolution which was adopted at the annual meeting of the South-eastern Branch of the British Medical Association on the 10th inst.: "That this meeting desires to record its unqualified approval of the conduct of the elected representatives on the General Medical Council during their term of office, and its high appreciation of the valuable services which they have rendered to the profession. It begs to offer them very grateful thanks and the assurance of cordial support at the ensuing election in November." It is to be hoped that this feeling of satisfaction is general, and that no mere desire for change will interfere with the work that has been so well commenced. By re-election of the present representatives their position will be strengthened. Well-directed experience is of greater value sometimes than new blood.

THE SANITARY STATE OF SHETLAND.

THE action recently taken by the County Council for the area in which Shetland is included seems to be the first intimation of the existence of a sanitary law or of public health administration which has been received by the crofters inhabiting that portion of Great Britian; and it is stated, in consequence, to have created no little commotion. But the need for bringing public health regulations to bear upon this community is abundantly shown by the details published as to the existing state of things. Calves, sheep, or pigs were found occupying the dwelling houses in twenty cases in the parish of North Mavine; communication direct or indirect often existed between the dwelling house and the byre; manure was found heaped up against the walls; and the burial ground of Hillswick was densely packed with human bodies, only twelve to twenty-four inches of soil covering the coffin-lids. Few things tend more to the degradation of a people than to live under such circumstances of filth and sanitary neglect, and it is to be hoped for the sake of at least the next generation of Shetlanders that the action of the County Council will soon turn such discoveries as have been made into matters of past history.

RELAPSE AFTER OPERATIONS FOR THE RADICAL CURE OF HERNIA.

DR. WILLIAM T. BULL of New York has published in the *New York Medical Journal* of May 30th a paper he read at a recent meeting of the New York Surgical Society. The material for the paper was collected at the Hospital for Ruptured and Crippled during the past three years, and it threw light upon the frequency with which relapses of hernia occur after operations for so-called radical cure. The total number of cases of relapse observed was 119, and in seventy-three, details of the method of operation employed were obtained. The result of this inquiry shows that relapse occurred after all the recognised modern operations. It is especially worthy of note that in some cases the relapse did not occur for more than two years, in one case not until three years and four months after the operation. It is clear therefore that no case must be spoken of as a "cure" that is not free from any sign of relapse at least five years after operation, and certainly for this length of time a light, well-fitting truss ought to be worn. Dr. Bull's figures lend no support to the view that a scar obtained after suppuration and granu-

lation is stronger than that arising from primary healing of the wound, and he is firmly persuaded that primary union of the wound should always be aimed at. These statistics seem to fully justify Dr. Bull in urging surgeons not to speak of radical "cure" of hernia, and to concentrate their attention upon guarding their patients against relapse rather than upon a brilliant primary result. It is only right to add that in all the cases in which a truss had been worn after the operation, the patient's condition was decidedly better than before operation, which could not, therefore, be looked upon as wholly useless.

THE INSTRUCTION OF DEAF-MUTES.

AFTER a somewhat chequered history the development of the oral system of instructing deaf-mutes in the use of language has achieved that general recognition to which, as a scientific method, it is fully entitled. Its progress in this country, though recent and by no means so marked as in some foreign countries—notably, in Germany, Switzerland, and Italy—has not been insignificant. In the metropolis it has decidedly taken root, and occupies the field of education unopposed. Among other proofs of its vitality we may mention the existence of the Association for the Instruction of the Deaf and Dumb, the report of whose proceedings for 1891 now lies before us. Founded in 1871, under the auspices of the Baroness Meyer de Rothschild, and with the active co-operation of Sir William Dalby, Dr. Dasent, and others, the Association has proved its earnestness of purpose by its increasing literary activity, and by the still more practical efforts of which its Normal School is the result. According to the report already mentioned, thirty-six boys and fourteen girls have during the year attended the school, while seven teachers have received instruction there during the same period. The committee of the Association observe with satisfaction the growing ascendency of the purely oral system in this country, and they appeal for public aid in promoting the objects of the Association, which include, first, the establishment of the oral method; and secondly, as a means to this end, the formation and maintenance of a training college and school at present represented by the institution in Fitzroy-square. In view of the importance of these objects it is needless for us to further commend the work of this deserving society.

THE HOWARD SOCIETY'S WORK.

A BRIEF summary which has just been published reminds us of the valuable service rendered to that union of all duties which we call morality by the Howard Association. It is hardly needful that we should relate afresh these proofs of its fidelity to a great example. It has deserved well of the Legislature, the executive, the press, and the public. Its energy and vigilance have been powerfully exerted in the cause of order and the repression of crime, and have acted as a useful check upon possible abuses in prison management. Its literary efforts have been equal to its more practical activity, and, grounded as they are in the findings of experience, entitle its utterances in reference to preventive reforms to an attentive hearing. Not the least important among its productions is one by Mr. W. Tallack, "Penological and Preventive Principles," which compares the reformative methods known in this country with some of those pursued in America, notably that of Elmira. We will not say that the sweeping condemnation bestowed upon this latter system should be unreservedly approved, though it presents us, as its English critic says, with a rather luxurious aspect of criminal detention. Release on parole after one or two years of good conduct, industrial work, and school training, even in cases of aggravated crime, appears in our ideas a result somewhat too easily earned. At the same time we are pleased to recognise as its guiding principle the conviction that crime, like disease, can be extirpated, so that the criminal may be expected to return to the ranks of the morally sound. The means employed is also similar—namely, encouragement of the *vis medicatrix naturæ*, which is in this case the intelligent will-power.

THE PHYSIOLOGICAL ACTION OF KOLA NUT.

DR. KOTLIAR, wishing to elucidate the action of kola nut, which, as is well known, has been recommended for increasing the power of the body to undergo a severe strain of work, has made a series of observations in Professor Manassein's clinic in St. Petersburg on the alteration of the chemical processes of the body when under the action of the drug. The observations were made on seven healthy young men, each being observed for two consecutive periods of five days. In some the drug was given during the first period, and the subject was kept at rest from work. In others the subjects worked hard, and the drug was given during the second period. The quantity of powdered kola nut taken per diem was a drachm. From careful analyses of the food and excreta it was found that under conditions both of rest and work kola increased the assimilation of phosphorus and sulphur. That of chlorine was increased during rest, but was not altered by kola under conditions of work. The metamorphosis of chlorine was diminished by kola both under conditions of rest and work, especially in the latter case. The metamorphosis of phosphorus was diminished both at rest and at work, but more especially during rest. The same may be said of sulphur. Finally, the breaking up of phosphorus and sulphur compounds both during rest and work, as compared with that of nitrogenous compounds, was diminished. The paper referred to is published in the *Vrach*, No. 19, 1891.

THE BACILLUS OF LEPROSY.

A TELEGRAM from Simla, dated June 12th, contains an important announcement, which points to a distinct advance in the bacteriology of leprosy, due to the researches of the members of the Leprosy Commission. It is to the effect that Drs. Rake and Buckmaster have succeeded in cultivating the leprosy bacillus in serum. They were assisted in their researches by Surgeon-Major Thomson.

MONKEY TALK.

A STORY has reached us from the other side of the Atlantic that the phonograph has been applied in order to unravel the secrets of monkey talk. Herein, if the story be true, lies a curious study for our psychological brethren, and a new experimental series of research. The experiments hitherto accomplished are elementary, but if sustained are of singular import. The phonograph is brought to bear on the monkey, which is led to utter sounds in its own *patois*, within the recording range of the merciless instrument. Its speech is in this manner taken down phonetically, and is then recited, *totidem verbis*, to other monkeys that have not been present at the time when the recording instrument was at its duty. According to the character of the speech so the effect. If the observations be of a violent and threatening kind, the monkey listener is seized with sudden fear and flies from the place to seek safety or protection. If the conversation be of an appetising character, the listener responds by indicating his desire for food. These and sundry other manifestations of intelligent intercommunication by monkey linguistic skill are reported, and soon we are promised a complete literature of this next but one, and he a missing link, to man. Do not let our readers suppose that we are dealing too lightly with

this subject. The question whether lower animals have a speaking language has occupied the attention of man for ages. The Koran describes King Solomon as listening to, learning, and interpreting the language of ants; and it may be that language of different kinds passes between animals for expressing different wants and indications of danger. "Animals have a voice, men speak" has, up to this day, been the common belief. Now, for the first time, we have a means of discovering whether the voice of the animal is or is not a definite, however elementary, form of speech. Do monkeys, for instance, talk intelligibly? All do not, we know, but do some?

UNIFORM HOSPITAL ACCOUNTS.

THE accountant of Guy's Hospital has attended before the Lords' Committee upon Metropolitan Hospitals, and explained the error in the published accounts of that institution for the past year. It appears that the error in question was not passed by the auditor, having crept in during the printing operation, and after the passing and signing of the revised proof. It is a little strange that after the passing of the proof *without correction*—and we understand this to have been intended by Mr. Williams's evidence—anybody should have been suffered to meddle with the type; but that is an affair of the printer's office, with which obviously the hospital authorities and the auditor have nothing to do. We are glad to be able to record so satisfactory an explanation of an error which while unexplained gave strong colour to the suspicion that there was laxity not only in the printer's, but probably also in the accountant's office.

THE PUBLIC HEALTH OF ITALY.

THE Consiglia Superiore di Sanità at its recent sittings had a quite satisfactory account to give of the health of Italy during the February, March, April, and May, of 1891 as compared with that of the corresponding four months in previous years. Measles, indeed, and influenza, were more than usually prevalent, but all the other infective diseases marked a notable decrease. This was eminently the case with small-pox—the decline of which is steady and progressive in proportion as vaccination and revaccination cover an ever-increasing area of the population, aided by the vigilantly regulated supply of the purest lymph secured by the "Istituto Vaccigeno dello Stato," or State Institute for the Provision of Vaccine. Among the causes of the improved health conditions of the peninsula, the Council make mention of the skill and energy of that provincial medical service; the care bestowed by the communal and municipal authorities on the water-supply, whether as to quality or quantity; and the surveillance exercised over the dispensaries, fixed or migratory (*ambulatori*), which are attached to the local pharmacies. To bring the practice of these dispensaries under the sanitary law of the country has long been a most desirable innovation, and, now that it is *un fait accompli*, the results already attained are such as to give gratifying earnest of the good effects it has yet in store. In a few years such panics as a cholera explosion too often produces in the provinces, or even in urban centres of which better things might have been expected, will no longer paralyse the medical staff, and, by turning the populace against their natural protectors, assist the spread of the malady.

PATHOLOGY OF TRIGEMINAL NEURALGIA.

THE pathology of trigeminal neuralgia may be regarded as one of the unsettled questions in medicine; for whereas some look upon it as a central nervous change, and adduce specimens to support their contention, others regard it as consisting essentially in a peripheral change. Dr. C. L. Dana, in a recent contribution to the subject, has expressed the opinion that the condition is the result of an obliterating arteritis of the nutrient vessels of the nerves. His reasons for this view are that the disease occurs at a time of life when degenerative changes begin in the arteries, and that it follows a certain fixed vascular distribution. He also states that he has examined the superior maxillary nerves removed in typical cases of tic-douloureux, and in none of them did he find any noteworthy change in the nerves, whereas in three of them there was striking evidence of vascular disease of the character referred to, while in the other two cases no bloodvessel was present in the specimens examined. Therapeutic experience he also regards as favouring this view, and he points especially to the effect of aconite, which lowers tension in this condition, and also to the occasional immediate relief afforded by nitro-glycerine. As removal of the peripheral nerve sometimes undoubtedly effects a cure, Dr. Dana concludes that the disease is peripheral and the result of some local peripheral irritation, and he mentions recent researches by MM. Quenan and Lepars which indicate the existence of a closer and more extensive relationship between the nerve trunks and bloodvessels than has hitherto been supposed, and in which they suggest the possible dependence in some cases of neuralgia upon vascular changes.

THE CAVENDISH LECTURE.

WE doubt very much whether the *rationale* of the purgative and diuretic treatment, that has formed so large a part of medical prescription from the earliest times, has ever been so lucidly and happily expounded as it is by Dr. Lauder Brunton in the lecture we publish to-day. He brings home to us by the use of the simplest of analogies the meaning of accumulation of effete material within the system, and the importance of attention being paid to its efficient elimination. There is wide scope for the investigation of the various disordered states of the economy that may be traceable to defects in the due performance of this important function; and it is well to have a broad and comprehensive view of what is entailed by its failure. The homely style of Dr. Brunton's address, and the practical details with which it abounds, are balanced by the vein of scientific reasoning that pervades it all, thus illustrating the truths that knowledge illumines even the smallest matters, and that the practical and the scientific in medicine are indissolubly bound up together.

REPLACEMENT OF BONE AFTER TREPHINING.

DR. WEIR, in relating in a recent number of the *New York Medical Journal* some particulars of a patient suffering from traumatic epilepsy, and on whom he had operated, takes the opportunity of giving his experience with regard to the replacement of bone after trephining. At the first operation trephining was performed over the frontal region, where there was a marked bony depression and the inner table was found driven in angularly. A great improvement followed, and then the patient was lost sight of, but returned in 1887 with a relapse in his fits and a condition of mania, with severe pain over the forehead. On operating a second time, three 1 in. trephine holes were made, and the opening further enlarged with bone forceps. Some pus was found in the frontal sinus, but the brain and membranes were healthy. The three discs of bone were returned, having been kept in a warm antiseptic cloth, and the interstices filled up as far as possible with the chips. Everything healed up without any trouble, and the fits were much reduced in number. The patient recently returned to hospital on account of a burn, and thus afforded an opportunity of seeing the result of the replacement of bone four years after it had been done. It

was found that the whole bony surface was somewhat sunken, but no irregularities could be felt, and the author has no doubt that all the rough places are soon made smooth, and that there is nothing to fear, as he was inclined to do, from irritation by the fragments of the underlying cortex. At one point in the depressed bone a slight pulsation was visible, due, Dr. Weir thinks, to partial absorption of the bone, and he mentions a similar condition occurring in a case in which he removed a sarcoma from the brain, afterwards replacing the bone, which formed a firm solid plug. Recurrence of the growth took place, and about two years and a half after the original operation pulsation appeared over the trephine opening, the reimplanted bone was pushed up, and gradually disappeared entirely. The fate of such pieces of bone is a very important point in cerebral surgery, and the greater the experience becomes the greater seems the boldness with which they are dealt, a boldness which is apparently justified by the good results which are obtained.

LONDON WATER-SUPPLY INQUIRY.

THE committee of the House of Commons which is dealing with the London Water Bills has found that the time at its disposal is insufficient for the consideration of such questions as the quality and quantity of water supplied from the existing sources, and has declined to receive evidence on these points. Under these circumstances the inquiry is practically limited to the question of constitution of the authority which will eventually own the London water-supplies, and which will, therefore, we presume, be the purchaser of the water companies' undertakings. We do not anticipate that the committee will hesitate to accept the proposals made by the London County Council and the Corporation of the City—viz, that the water authority should consist of a statutory committee of the Council, to which the Corporation would contribute a proportion of members; and further, that the authorities beyond the limits of the London County will themselves undertake all the arrangements in their own districts.

SMALL-POX IN LONDON.

FOR some time small-pox has shown a tendency to spread in London, and cases have occurred in a number of districts, particularly in Rotherhithe, Deptford, and Bethnal-green. During the last two or three weeks the number of fresh cases has diminished, and it may be expected that the disease will disappear during the summer months. This is the usual behaviour of small-pox, and it is safe to predict that this year will not be exceptional. At a meeting of the Metropolitan Asylums Board held last Saturday, Mr. Scovell, chairman of the Ambulance Committee, it is reported, "contended that the metropolis had been saved from an epidemic of small-pox only by the care of the Board and its officers, and suggested that no thanks were due to the local authorities that the disease had not spread." We do not know on what grounds this statement was made, but it affords further reason for hoping that the Public Health (London) Bill will become law during the present session. There is no subject to which the London County Council could more usefully devote its attention than the prevention of epidemic disease. A recent experience demonstrated the advantages to London of the coöperation of the Council with the district authorities in the suppression of an outbreak of typhus fever. In regard to small-pox, the Council some months ago urged upon sanitary authorities the desirability of prompt information being given to the vaccination officer concerning all cases of small-pox which become known to the medical officer of health through the Notification of Infectious Diseases Act. If Mr. Ritchie's Bill should pass, the London County Council's administration would be brought definitely into relation with this subject matter, and the Council would no doubt by watchfulness over epidemic disease-prevalence in the metropolis be able to render useful services in ensuring that all needful precautions were taken. We hope Mr. Scovell has less foundation for his observations than he appears to think, but we none the less hope that the London County Council's hands will be strengthened without delay.

BACTERIOLOGY OF GLANDERS.

DR. FINGER of Vienna has investigated the subject of immunity, selecting the bacillus of glanders as being a microbe whose properties have as yet been very little studied. After a long series of researches he has arrived at the following conclusions[1]:—1. Successive local injections of the bacilli of glanders into animals susceptible to the poison produce with each injection symptoms of gradually diminishing virulence—that is to say, the first injection only produces the typical nodules, the later ones causing an abortive type of the disease. 2. The constitutional symptoms of glanders after intravenous injection of virulent cultures produces an incomplete local immunity, and an abortive course after subsequent local injections. 3. Intravenous injection of virulent cultures quickly causes death in some animals—sometimes in a few hours; in such cases post-mortem examination fails to discover any local manifestation of the disease. 4. Intravenous injection of a sterilised culture of the bacilli of glanders produces in rabbits an immunity against the infection from pure cultures which lasts from three to six weeks. Local manifestations, however, occasionally appear, these being of an incomplete nature and not followed by any constitutional symptoms. At the end of the above-named period, however, the injections are followed by a typical and rapidly fatal disease. 5. Rabbits which have survived an ordinary attack of the disease enjoy afterwards complete immunity. Repeated local injections simply produce a transitory local affection, constitutional symptoms never following. 6. This immunity does not appear to be able to be transferred to the offspring—that is to say, does not become hereditary. 7. The injection of sterilised cultures of the bacilli or of their chemical products produces poisonous effects, generally mild in character, but sometimes so severe as to kill the animal. Post-mortem examination reveals the same lesions as are seen in the primary disease, localised mainly in the portal system. 8. Injections of sterilised cultures produce an immunity, though not always complete, against intravenous injection of virulent cultures. 9. If sterilised and virulent cultures are injected at the same time, the disease produced is exceedingly rapid and fatal. 10. The bacilli when introduced into the tissues of susceptible animals exhibit great activity, multiplying rapidly, growing into long threads, and apparently defying the action of the phagocytes. 11. In the tissue of non-susceptible animals, such as white mice, the bacilli show no signs of activity; they rapidly die and disappear. There seems, however, to be no intervention of leucocytes. 12. In rabbits which have been rendered artificially proof against the poison the bacilli seem to take longer in disappearing. There is rapid collection of leucocytes, with some exudation. 13. The rapid death of the bacilli in the white mice is probably to be referred to an active power of destruction possessed by the organism. 14. The slower disappearance in other animals is to be referred to the action of the leucocytes, which appear to play a special *rôle*, as first described by Metschnikoff under the term of "phagocytosis." But, in addition to this, Dr. Finger considers that the fluid of the tissues themselves plays a prominent part in the destruction of the microbes.

[1] Wiener Medicinische Wochenschrift, No. 19, 1891.

FOREIGN UNIVERSITY INTELLIGENCE.

Buenos Ayres.—Dr. Sicardi has been appointed Professor of Clinical Medicine. Dr. Castro has been appointed Acting Professor of Clinical Surgery.

Geneva.—Dr. Haltenhoff has been promoted to be Extraordinary Professor of Ophthalmology.

Vienna.—Dr. v. Frankl-Hochwart and Dr. Lorenz have been recognised as *privat docenten* in Medicine.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. L. Lorenz, a well-known physicist at Copenhagen, at the age of sixty-three.—Dr. A. Babukhin, Professor of Histology in the University of Moscow.

WE have been asked to state that it has been arranged to hold the annual general meeting of the Association of Fellows of the Royal College of Surgeons of England at the Medical Society's rooms, Chandos-street, W., on Thursday, June 25th, at 5 P.M., instead of at 20, Hanover-square, as announced last week.

AMONG the sequestrations effected by the Italian health officers under the authority given them by the new code are numerous counterfeit specimens of mineral waters. These, as exhibited for sale in grocers' shops and even pharmacies, were found to be simply water, more or less pure, "medicated" into some semblance of the liquid obtainable from one or other of the natural sources—"Uliveto" in particular. Non-Italian waters, also counterfeited, have been seized in large quantities.

DURING the recent cholera epidemic at Prome among the Indian hill coolies (says an evening contemporary) several sick men tried to throw themselves from the hospital flat into the river, owing to the intense heat. One patient succeeded in doing so, and was being rapidly carried away by the strong current of the Irrawaddy, when Surgeon Waller, of the Medical Staff, who was in charge of the hospital, jumped into the river and rescued him.

AT the Senate House of the University of Cambridge on Tuesday last the degree of Doctor of Science (*honoris causâ*) was conferred on Mr. W. H. Flower, C.B., F.R.S., and Dr. Elias Metschnikoff.

METROPOLITAN HOSPITAL SUNDAY FUND, 1891.

In addition to the returns published in our last issue giving the amounts collected in aid of the Metropolitan Hospital Sunday Fund, we have received notification of the following amounts. The returns are, of course, as yet incomplete, and we only publish particulars of the larger amounts collected. The total sum received at the time of our going to press on Thursday evening amounted to £33,000.

Donations.	£	s.	d.
Sir Saville Crossley, Bart., M.P.	1000	0	0
Theodore Lloyd, Esq.	25	5	0
G. W. Medley, Esq.	20	0	0
Messrs. Peak, Frean, and Co.	25	0	0
Church of England.			
St. Jude's, South Kensington (Rev. Preb. Forrest, D.D.)	1300	0	0
St. Michael's, Chester-square (Rev. Canon Fleming, B.D.)	1200	17	6
The Temple Church (The Very Rev. Dean Vaughan)	175	8	9
St. Marylebone Parish Church (Rev. Canon W. Barker)	110	17	3
Quebec Chapel (Rev. E. B. Ottley)	166	2	7
St. James's, West Hampstead (Rev. C. M'Anally)	203	2	1
Curzon Chapel, Mayfair (The Rev. T. J. F. Bennett)	209	8	0
St. Stephen's, South Dulwich (Rev. J. Meek Clark)	142	13	0
St. James's, Piccadilly (Rev. Preb. J. E. Kempe)	274	10	3
St. Mary's, Kilburn (Rev. J. Robertson)	107	10	2
St. Margaret's, Westminster (Archdeacon Farrar)	274	10	0
St. Matthew's, Brixton (Rev. N. A. Garland)	102	4	6
St. James's, Clapham Park (F. A. C. Lillingston)	130	9	5
St. Mark's, North Audley-street (Rev. J. W. Ayre)	176	6	5
St. Mary Abbotts, Kensington (Hon. the Rev. E. Carr-Glyn)	518	19	2
Westminster Abbey (Rev. Canon Furse)	174	8	10
St. Barnabas, Addison-road (Rev. G. R. Thornton)	133	2	4
Holy Trinity, Sydenham (the Rev. H. Stevens)	236	12	11
St. Augustine's, Queen's Gate (Rev. R. R. Chope)	109	4	2
St. Bartholomew's with St. Matthew's, Sydenham (Rev. Canon Yeatman)	138	3	5
St. Stephen's, Castle Hill, Ealing (Rev. B. S. Tupholme)	106	9	0
All Souls', Langham-place (Rev. W. Hay Chapman)	125	18	0
Christ Church, Hampstead (Rev. G. F. Head)	203	18	10
St. Matthew's, Bayswater (Rev. J. F. Sullivan)	139	14	1
St. Nicholas, Chislehurst (the Rev. F. H. Murray)	270	4	8
St. Anne's, Highgate Rise (Rev. C. T. Ackland)	21	3	2
Berkeley Chapel, Mayfair (Rev. Canon T. Teignmouth Shore)	41	5	0
St. Andrew's, Stockwell	24	5	5
St. Paul's, Camden-square	60	9	10
Grosvenor Chapel, South Audley-street	75	7	10
Holy Trinity, Paddington (Rev. Preb. D. Moore)	228	5	2
Brunswick Chapel, Upper Berkeley-street	42	10	8
Hospital Chapel of St. Mary and St. Thomas of Canterbury, Ilford	48	15	5
St. George's, Hanover-square (Rev. Canon Capel Cure)	181	0	3
Church of the Annunciation, Chislehurst	30	15	7
St. Saviour's, Ealing	34	3	0
Acton Parish Church with St. Andrew's Mission	38	1	8
St. John's, Upper Norwood	33	9	2
Rosslyn-hill Unitarian Church, Hampstead	68	14	7
St. Mary's, Lewisham	40	10	0
St. Margaret's, Lee	49	4	3
St. Michael and All Angels, Blackheath Park	72	17	0
St. Mark's, Kennington (Rev. Gerald Bowman)	51	1	11
St. John the Baptist, Kingston-vale	22	4	3
Finchley Parish Church	45	14	0
Monken Hadley Parish Church	34	5	0
St. Paul's, Clapham-park	42	2	4
All Saints', Clapham-park	46	7	5
St. John the Baptist, Leytonstone	22	13	1
Church of the Good Shepherd, Lee (Rev. J. G. Rogers)	20	7	3
St. James-the-Less, Westminster	26	2	4
St. Paul's, Knightsbridge (Rev. H. M. Villiers)	422	3	3
St. Mary's, Graham-street	30	3	5
All Saints' and St. Andrew's, Carshalton	32	0	0
St. Saviour's, Highbury	30	17	7
Christ Church, Brondesbury	61	14	9
St. Andrew's, Holborn	25	11	9
St. Luke's, Redcliffe-square	42	2	10
Wandsworth Parish Church and Holy Trinity	66	7	0
All Saints', West Dulwich	23	9	6
St. Mark's, Regent's-park	21	18	0
Streatham Parish Church	73	1	1
Chislehurst Chapel	30	2	10
St. Gabriel's, Warwick-square	78	11	5
Wimbledon Churches (Rev. Canon Haygarth)	181	12	8
Emmanuel Church, Wimbledon	61	14	6
St. Peter's, Bayswater (Rev. C. M. Moore)	146	3	9
All Saints', Margaret-street	70	10	0
Holy Trinity, Anerley	50	5	2
Hornsey Parish Church, Chapel, and Mission Hall	53	7	8
Fulham Parish Church	38	14	0
Immanuel Church, Streatham-common (Rev. G. S. Streatfield)	117	7	7
Harrow Weald Church	26	0	0
St. John's, Redhill	20	14	9
St. John Divine's, Kennington (Rev. C. E. Brooke)	55	0	4
St. Mary's, Hornsey-rise	45	8	11
St. James's, Holloway (the Rev. E. A. Stuart)	101	16	6
Holy Trinity, Wandsworth	47	13	0
St. Stephen's, Wandsworth	54	1	3
St. Mildred, Leo	25	16	10
St. Lawrence, Catford	25	11	9
St. Saviour's, Brixton-hill	23	0	9
All Saints', Kensington-park	45	5	10
Christ Church, Highbury	34	9	2
Church of Ascension, Balham (the Rev. Herbert Curtis)	91	7	11
St. Michael's, Battersea	25	5	0
Church of Immaculate Conception, Farm-street	29	17	1
St. Saviour's, Fitzroy-square	40	10	0
Christ Church, East Greenwich	48	1	9
Carmelite Church, Kensington	28	0	0
St. Mary's, Bryanston-square (Hon. and Rev. Canon Leigh)	160	0	0
Trinity Church, Hampstead	87	7	3
St. Anne's, Highgate-rise, and Mission-room	21	3	2
St. Saviour's, Denmark-park	32	6	9
St. Mary Magdalene, Munster-square	26	12	2
Congregational.			
Clapham Congregational	52	15	7
Upper Norwood	34	13	0
Union Chapel, Islington, Rev. H. Allon, D.D.	100	1	5
Baptist.			
Heath-street, Hampstead	60	1	9
Presbyterian.			
Colebrooke-row	30	15	6
St. John's, Kensington (Chas. Moinet, M.A.)	92	0	0
Regent-square (the Rev. John MacNeil)	267	17	2
Park Church, Grosvenor-road	27	0	0
Marylebone	53	4	10
Various.			
The Theistic Church, Swallow-street (the Rev. C. Voysey)	105	3	6
Dutch Church, Austin Friars	25	8	2

Other subscriptions have been received, and will be announced in our next issue.

THE ROYAL SOCIETY CONVERSAZIONE.

SIR WILLIAM THOMSON received a distinguished company at the conversazione held at Burlington House on Wednesday last. Among the most interesting of the exhibits was a new electrical influence machine, consisting of two plain glass discs without sectors. Mr. Wimshurst also showed a small electric motor of considerable power worked by alternating currents from one of his machines. In the same department of science, Professor J. J. Thomson produced a discharge through a gas without the use of electrodes by surrounding the discharge-tube with a thick coil of wire, which acts as the primary of an induction coil, the highly exhausted gas itself forming the secondary coil. This discovery has a distinct bearing on the use of electricity as an adjunct to medicine, as by passing a current through wire coiled *round* the part under treatment rapidly alternating currents could be produced without any shock.

Professor Crookes showed some very beautiful examples of the phosphorescence of precious stones under the bombardment of molecules caused by the electric discharge *in vacuo*; and also illustrations of the volatilisation of infusible metals at ordinary temperatures by the same means. An interesting demonstration of the extinction of the magnetic properties of metals by heat was given by Mr. Shelford Bidwell.

That most remarkable body, nickel-carbon-oxide [$Ni(CO)_4$] was exhibited by Mr. Ludwig Mond. It is a colourless liquid, produced by passing carbon monoxide over finely divided metallic nickel. It is highly poisonous, and has, when injected subcutaneously in very small doses, an extraordinary power of reducing the temperature of animals. The substance decomposes, on heating its vapour to 180° C., into nickel and carbon monoxide, and articles can be plated with the metal by simply exposing them to the vapour.

A method of personal identification by means of finger prints was explained by Mr. Francis Galton, who gave evidence of the persistence of the patterns formed by the papillary ridges in their essential details, however minute, from infancy to old age. Captain Abney exhibited an apparatus for the registration of colour by referring any mixed colour to a single wave-length and a percentage of white light, and also demonstrated the greater sensitiveness of the eye to different colours. A curious optical illusion, consisting of two rotating discs covered with spiral patterns, enabled Professor Sylvanus Thompson to disprove the theory of M. Javal (director of the Ophthalmological Laboratory of the Sorbonne), that the complementary subjective illusions of motion are due to involuntary slipping of the muscles of the eyeball. They cannot slip radially in all directions at once. An ingenious cup-micrometer for measuring the rate of growth of a plant was shown by Mr. Francis Darwin. Mr. Walter Gardiner, with another apparatus, demonstrated the phenomena of root-pressure and the transpiration current.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Soothill Upper Urban District.—As a rule we avoid noting vital statistics relating to short periods, such as one month, and particularly in respect of districts having only small populations, where they become especially misleading. But the announcement by the medical officer of health of Soothill Upper that a rate for the month of April of 24·8 per 1000 per annum is "what may be called a fair average death-rate" can hardly pass without notice. The rate itself for such a period may have absolutely no significance whatever; but we sincerely hope, for the sake of this little Yorkshire district, that it is greatly in excess of any annual average. The mean death-rate from all causes during the ten years 1880–89 in the twenty-eight large cities and boroughs of England and Wales was 20·8 per 1000, and any mean rate beyond 16 per 1000 which may exist in Soothill Upper should lead to the adoption of instant inquiry with a view to eliciting its causes and to the prevention of that excess of death by which such a rate is brought about.

St. Olave.—According to Dr. Wightwick the corrected death-rate for this metropolitan district during 1890 was 20·2 per 1000. The notification system has evidently facilitated measures of prevention, for out of 109 cases notified 71 were removed to hospital; but as regards the notification of erysipelas, the health officer's comment is adverse, for diseases which cannot be regarded as infectious are often returned under that somewhat indefinite heading. Last year typhus fever was traced out and dealt with in this district; it is therefore satisfactory to learn that no such case has occurred since November, 1889.

Hackney.—In Hackney the death-rate last year was 20·3 per 1000, and the notified diseases were 1171 in number. The increased information thus obtained has led to an increase of sanitary work, and this especially in the matter of disinfection. One additional piece of work is naturally resented by Dr. Tripe—it is that of giving certificates to owners of dwelling-houses under the Customs and Inland Revenue Act, 1890. By these certificates the owner is distinctly benefited, and yet no fee can be demanded for the work of inspection on which they are based.

Leicester Urban District.—Another of the excellent series of reports issued by Dr. Henry Tomkins has reached us, and at the forefront stand two recommendations that may well be borne in mind by so rapidly increasing a borough, a district, indeed, as to which even further extension is contemplated. The first is as to the need for open spaces in the ever-increasing mass of bricks and mortar; and the other urges the abolition of at least the worst of the slaughter-houses in the densely crowded parts of the town. Both are important; and as regards the second we hope the day will soon come when the killing of animals and the retention of human food in intra-urban slaughter-houses will be condemned by the demand of public opinion. The death-rate for 1890 is calculated as 17·8 per 1000, and the zymotic rate as 2·1 per 1000. In reference to notification, Dr. Tomkins again explains that the cases of erysipelas—207 in number—have no significance from a public health stand-point. The infectious hospital received 480 patients, and it is significant of the value of notification that no less than 400 patients out of a total of 516 known to have been attacked with scarlet fever should have been removed to hospital. No case of small-pox was received during the year; but it is well to remember, in view of the attitude adopted in Leicester as to this disease, that their hospital is admitted to be unsatisfactory in point of construction and arrangement. The water-carriage system is now rapidly displacing the pail closet system, and further extension in this direction is advocated in the interests of health and freedom from nuisance. A full account of the work done in the health department under Dr. Tomkins' supervision cannot be attempted in our comment, but the multitudinous subjects dealt with in this year's report show how the welfare of the inhabitants is cared for, and how the demands on the time and abilities of the health officer must be increasing.

Bilston Urban District.—After giving some detail as to occurrences of infectious diseases during the past year, Dr. T. R. Bailey reminds his sanitary authority that whilst the adoption of the system of notification materially increases his information as to what means of prevention are needed, the district lacks the required power of isolating first cases of infection owing to the inadequacy of the cottages now possessed as a hospital for infectious diseases. Estimating the population at 23,000, the death-rate for 1890 was 21·3 per 1000. Both measles and scarlatina were somewhat prevalent, and nineteen cases of the latter disease were removed to the cottages referred to.

Barnsley Rural District.—Dr. M. T. Saddler received 101 notifications of infectious disease last year, and use was made of the excellent Kendray Hospital in isolating such cases as called for removal. Whilst progress is still going on as to the provision of means of drainage and of water-supply, a number of places still stand in need of further improvement, especially as to water; and a hope is expressed that, by the aid of the County Council, steps may also be taken to prevent the serious pollution which arises in the River Dearne before it enters the district. The offensiveness arising from the river has been considerable, although some changes for the better have resulted in consequence of altered methods of dealing with trade refuse &c. With

the exception of one-half of Royston, the whole district has been provided with pipe sewers since 1873, and the benefits consequent on this action concern a population of 24,670 people. The death-rate for 1890 is estimated at 20·4 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6391 births and 4293 deaths were registered during the week ending June 13th. The annual rate of mortality in these towns, which had been 30·9 and 28·3 per 1000 in the preceding two weeks, further declined to 23·8 last week. The rate was 23·3 in London and 24·2 in the twenty-seven provincial towns. During the first ten weeks of the current quarter the death-rate in the twenty-eight towns averaged 27·9 per 1000, and considerably exceeded the mean rate in the corresponding periods of the ten years 1881–90. The lowest rates in these towns last week were 14 in Brighton, 16 in Plymouth, 17·1 in Derby, and 17·5 in Bradford; the highest rates were 30·9 in Preston, 31·4 in Liverpool, 32 in Halifax, and 37·6 in Blackburn. The deaths referred to the principal zymotic diseases, which had been 357 and 359 in the preceding two weeks, declined again last week to 313; they included 118 from whooping-cough, 77 from measles, 35 from diarrhœa, 34 from diphtheria, 26 from "fever" (principally enteric), 22 from scarlet fever, and 1 from small-pox. No deaths from these diseases were recorded in Bolton or Huddersfield; in the other towns the zymotic rates ranged upwards from 0·5 in Brighton and in Norwich to 2·5 in Preston, 2·6 in Liverpool and in Leicester, and 2·9 in Portsmouth. The greatest mortality from measles occurred in Hull and Portsmouth; from scarlet fever in Halifax; and from whooping-cough in Manchester, Birmingham, Salford, Leicester, and Cardiff. The mortality from "fever" showed no marked excess in any of the twenty-eight large towns. The 34 fatal cases of diphtheria included 21 in London, 3 in Manchester, 2 in Salford, 2 in Oldham, and 2 in Bristol. One death from small-pox occurred in London, but not one in any of the twenty-seven provincial towns; 7 small-pox patients were under treatment in the Metropolitan Asylum Hospitals, and not one in the Highgate Small-pox Hospital, on Saturday last. The number of scarlet-fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 859, against numbers declining from 927 to 885 at the end of the preceding three weeks; the patients admitted during the week were 61, against 88 and 66 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding four weeks from 620 to 547, further fell last week to 453, but were nearly double the corrected weekly average. The causes of 79, or 1·8 per cent., of the deaths in the twenty-eight towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Wolverhampton, Oldham, and in four other smaller towns; the largest proportions of uncertified deaths were recorded in Bristol, Sheffield, Liverpool, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 23·3 and 25·3 per 1000 in the preceding two weeks, declined again to 24·2 during the week ending June 13th, but was 0·4 above the mean rate that prevailed during the same period in the twenty-eight large English towns. The rates in the eight Scotch towns ranged from 11·8 in Perth and 19·7 in Dundee to 25·3 in Glasgow and 37·4 in Paisley. The 623 deaths in these towns showed a decline of 28 from the number in the preceding week, and included 26 which were referred to measles, 22 to whooping-cough, 14 to diarrhœa, 10 to scarlet fever, 5 to "fever," 2 to diphtheria, and not one to small-pox. In all, 79 deaths resulted from these principal zymotic diseases, against 67 and 74 in the preceding two weeks. These 79 deaths were equal to an annual rate of 3·1 per 1000, which exceeded by 1·4 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of measles, which had been 23 and 27 in the preceding two weeks, were last week 26, of which 16 occurred in Glasgow and 7 in Paisley. The 22 deaths referred to whooping-cough were within 3 of the number in the previous week, and included 6 in Edinburgh, 5 in Glasgow, and 5 in Dundee. The 14 deaths from diarrhœa showed a further increase upon the numbers in recent weeks. The fatal cases of scarlet fever, which had declined from 7 to 3 in the preceding three weeks, rose again last week to 10, all of which were recorded in Glasgow. The 5 deaths referred to different forms of "fever" exceeded by 2 the number in the previous week, and included 2 in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 173 and 142 in the preceding two weeks, further declined last week to 139, but exceeded by 41 the number in the corresponding week of last year. The causes of 53, or nearly 9 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 18·8 and 21·1 per 1000 in the preceding two weeks, further rose to 27 during the week ending June 13th. During the first ten weeks of the current quarter the death-rate in the city averaged 24·4 per 1000, the rate for the same period being 25 in London and 21·3 in Edinburgh. The 183 deaths in Dublin during the week under notice showed an increase of 47 upon the number in the preceding week, and included 4 which were referred to diarrhœa, 3 to whooping-cough, 2 to "fever," and not one either to small-pox, measles, scarlet fever, or diphtheria; in all, 9 deaths resulted from these principal zymotic diseases, against 1 and 3 in the preceding two weeks. These 9 deaths were equal to an annual rate of 1·3 per 1000, the rate from the same diseases being 1·7 in London and 2 in Edinburgh. The 4 fatal cases of diarrhœa exceeded the number recorded in any week since February last. The 3 deaths from whooping-cough and the 2 fatal cases of "fever" exceeded the numbers returned in recent weeks. The 183 deaths in Dublin last week included 35 of infants under one year of age and 45 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a marked increase upon those recorded in the preceding week. Eight inquest cases and 5 deaths from violence were registered during the week, and 56, or nearly a third, of the deaths occurred in public institutions. The causes of 21, or more than 11 per cent., of the deaths last week in the city were not certified.

THE SERVICES

INDIAN MEDICAL SERVICE.—*Bengal:* Surgeons to be Surgeons-Major (dated March 31st, 1891):—Francis Frederic Perry, Pultoney William Dalzell, Stephen Little, M.D., George Hart Desmond Gimlette, M.D., Christian Bernard Hunter, and Julian Carter Carington Smith.—*Madras:* Brigade Surgeon Charles Edwin McVittie to be Deputy Surgeon-General (dated March 7th, 1891); Surgeon-Major Henry James Hazlett to be Brigade Surgeon (dated March 7th, 1891). The Queen has approved of the restoration of the undermentioned Officers from the Half-pay List to the Effective List:—Surgeon Edward Donald Da Costa (dated April 6th, 1891); Brigade Surgeon William Smyth Fox (dated April 18th, 1891); Surgeon-Major Mark Robinson (dated June 11th, 1891).—*Bombay:* Brigade Surgeon Abraham Nickson Hojel (dated April 30th, 1891).

NAVAL MEDICAL SERVICE.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Inspector-General of Hospitals and Fleets James Nicholas Dick, C.B., has been placed on the Retired List of his rank.—The following appointments have been made at the Admiralty:—Fleet Surgeon Anthony Gorham, M.D., to the *Rodney* (dated June 15th, 1891); Staff Surgeon Herbert E. Marsh to the *Impregnable* (dated June 15th, 1891). Surgeons: Herbert Canton to the *Gannet* (dated June 15th, 1891), and J. Dowson to the Portsmouth Division Royal Marine Light Infantry (dated June 25th, 1891).

VOLUNTEER CORPS.—*Artillery:* 1st Cornwall (Duke of Cornwall's) Western Division, Royal Artillery: John Alfred Fox, Gent., to be Acting Surgeon (dated June 13th, 1891).—3rd Volunteer Battalion, the Welsh Regiment: Surgeon and Surgeon-Major (ranking as Major) J. L. W. Ward resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Battalion on his retirement (dated June 13th, 1891).—2nd Volunteer

Battalion, the Essex Regiment: Honorary Assistant Surgeon W. G. Gimson, M.D., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Battalion on his retirement (dated June 13th, 1891).—17th (North) Middlesex: Horace Sanders, Gent., to be Acting Surgeon (dated June 13th, 1891).

VOLUNTEER MEDICAL STAFF CORPS.—The Glasgow Division: Captain George Thomas Beatson, M.D., from the 1st Lanarkshire Artillery Volunteers, to be Acting Surgeon (dated June 13th, 1891).—Infantry: South Wales Brigade: Brigade Surgeon John W. Mulligan, from the Severn Infantry Volunteer Brigade, to be Brigade Surgeon, ranking as Lieutenant-Colonel (dated June 13th, 1891).

Correspondence.

"Audi alteram partem."

THE ELECTION AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

To the Editors of THE LANCET.

SIRS,—With your permission I should like to say a few words in regard to my candidature for a seat in the Council of the Royal College of Surgeons of England. If I had followed my own feelings and judgment, I should have abstained from coming forward this year, when only one absolute vacancy has occurred, and should have been more than content to leave Mr. Lawson Tait, who polled more votes than I did last year, to be the representative of the Fellows who desire to see their constitutional status raised to a level with that of the Fellows of other professional colleges. As, however, it was the wish of those with whom I have been working for the attainment of this end that I should stand again, I consented to do so, and I cannot but think that the moderate proposals embodied in the temperate circular just issued will commend themselves to all Fellows who think and act independently in regard to what are called College politics, and who have the welfare of the College at heart.

It may be as well to explain that my active connexion with the Association of Fellows did not commence till June, 1889, when I accepted office as a member of the committee, because I felt that it was only by combined action that desired improvements could be effected. For the policy of the Association prior to that date I am not responsible, but with all that has been done by the committee during the last two years I have been closely identified, working steadily with my colleagues to secure for the Fellows those privileges the concession of which would, in our opinion, materially conduce to the good of the institution and of the profession at large. I took part in that deputation of the Committee of the Association to the Council last year, which commended itself to Sir Spencer Wells, and joined in urging upon the Committee of Council the expediency of occasional consultation of Fellows of the College separately from the Members, granting to the Fellows a common room, modification of restrictive regulations in regard to the use of voting papers at the election of councillors, and submission of the proposed scheme of conjoint examination for the medical degrees of the University of London to the Fellows before its final ratification by the Council. This action of the Association was not without success, for an authoritative legal opinion has been obtained favourable to separate meetings of Fellows; a common room will doubtless be set apart for the Fellows in due time, for some of the members of Council expressed themselves as favourable to the proposal; our suggestions in regard to voting papers were only lost in the Council by the bare majority of one; and everyone admits that if the Fellows are to be consulted at all, it is the best course to consult them before instead of after the final ratification of any new proposal. If the Fellows of the College agree with me in thinking that it would be for the good of the College that they should be a more homogeneous, united, and influential body than they are at present, and think that if elected to the Council I could help to advance this object, I should esteem it a honour to have the opportunity of serving them to the best of my power. I am, Sirs, yours &c.,

Finsbury-square, E.C. WALTER RIVINGTON.

PROPOSED INCREASE IN THE NUMBER OF DIRECT REPRESENTATIVES ON THE MEDICAL COUNCIL.

To the Editors of THE LANCET.

SIRS,—May I, through your columns, ask medical practitioners heartily to take up the petition, which I forward to you for publication, to the Privy Council, asking for an increase in the number of direct representatives of the medical practitioners in the United Kingdom from five to eight? We have in accordance with the Act of Parliament petitioned the General Medical Council last year to move in securing the above increase. But the Council has not moved. Our next step is to petition the Privy Council. If a sufficient number of petitions are sent in, there is little doubt but that our prayer will be granted. If we do not send sufficient in, then the cry will be raised that the profession is careless, and does not want any increase. It will be remembered that although the Medical Act (1858) provided for the formation of the Medical Council, yet no direct representation was granted until the Medical Act of 1886 was passed. Dr. Waters, Mr. Wheelhouse, Dr. Leech, and Dr. Wade were the chief workers in securing for us such representation. Further, it is evident that the draftsmen of the Act of 1886 clearly saw a time would come when the growth of the profession would be such as to require an increase of direct representatives. That time has come. It seems very strange that although the income of the Medical Council is chiefly obtained from the registration fees of medical practitioners, the said practitioners have up till 1886 been given no voice whatever on the Council. It seems even stranger that, although twenty universities and medical corporations are represented on the Council, not one penny is given to the Medical Council by these bodies. This is still more palpable when it is further stated that we practitioners actually pay each university and corporation representative about £170 a year. The case stands thus: The university representatives are paid by us, but their universities do not contribute to the income. The medical practitioners pay for all, and are only *allowed* five representatives. Further, it certainly seems strange that although the Privy Council is given the power to elect, and does elect, five representatives on the Council, not one farthing is contributed by the Privy Council to the income of the Medical Council. Here, again, medical practitioners are given the pleasure of paying for those who do not represent them. In political life it is a maxim that if the Government is represented on a body, and is given part control over the actions of that body, then the Government must contribute. This is seen in educational, poor-law, and sanitary legislation. Why not in ours? The Government has as great a right to make an annual grant for the part defraying of the expenses of the Medical Council as it has to make a grant to the Council of Education. The Medical Council is a body acting purely and simply in the interest of the public. It does not, certainly, act in the personal interests of the profession. Further than making a grant in aid, many of us hold that the Privy Council would do good service if it from time to time elected as one of its five representatives on the Medical Council two members who represented truly the great mass of the profession. All along the Privy Council has in reality nominated those who represent the universities and colleges. Those who read the reports of the proceedings of the Medical Council must notice the genuine work performed by our direct representatives, more especially that of the English. If we had three additional representatives, I believe our Medical Council would become a truly national institution, and cease to be a representative of diploma-granting bodies.

I would urge that the different Medical and Medico-Ethical Societies pass a resolution in favour of granting an increase in the number of direct representatives, and forward such resolutions to the Privy Council. If, further, a deputation to the Lord President took place, it would greatly tend to ensure success. It has been said that the twenty representatives of the universities and corporations represent the graduates of these bodies; but I find from replies that the *councils* of the universities and corporations, and not the *mass* of the graduates, elect the above twenty.

I am, Sirs, yours faithfully,

Liverpool, June, 1891. ROBERT REID RENTOUL.

To the Right Honourable Viscount Cranbrook, Lord President, and the Right Honourable the Members of Her Majesty's Privy Council.

The petition of the undersigned registered medical practitioners of and its vicinity, humbly sheweth—

1. That the Medical Act, 1886, Section 8, provides for the election of

five direct representatives by the registered medical practitioners in the United Kingdom, while Section 10, Subsection 1, paragraph c., of the same Act provides the power for returning by the registered medical practitioners additional direct representatives to the General Council.

2. That petitions have been presented to and received by the General Council on November , 1890, urging the General Council to represent to the Privy Council that such increase in the number of direct representatives be provided for, and that the President of the General Council stated the proposal was one which would have to be "actually judged and decided upon by an authority outside and superior to the Council itself, to which authority, indeed, it would be more profitably addressed."

3. Your petitioners further beg to state that the registered medical practitioners since 1859 have paid no less than £155,985 as registration fees, and that the Universities and medical corporations represented on the General Council by twenty representatives do not contribute to the income of the said Council, although their representatives are paid for their services out of the above income.

4. That in 1875 the number of registered medical practitioners on the Medical Register was 22,715, while in 1890 the number had increased to 29,163, thus showing the necessity for an increase in the number of direct representatives.

5. Your petitioners would call your lordships' attention to the valuable help already given to medical education by the direct representatives on the General Council.

Therefore your petitioners humbly pray that your lordships will exercise the power vested in the Privy Council by Section 19 of the Medical Act of 1886, and direct that the registered medical practitioners in each of the three parts of the United Kingdom be given by your lordships the power of returning an additional direct representative for each of the three divisions of the United Kingdom. And that effect will be given to the prayer of your petitioners before November, 1891, when the next quinquennial election of direct representatives will take place.

And your petitioners will ever pray.

Name. Qualification. Full Address.

TERRIBLE VISITATION OF LOCUSTS IN THE PUNJAB.

To the Editors of THE LANCET.

SIRS,—The enclosed extract from a letter just received from Rawul Pindi is so interesting and so graphically and tersely describes a probable cause of disease, at all events a great pest in another sense, that I send it to you for your next number if you think it worth publishing.

Rawul Pindi, May 25th, 1891.

The Punjab has this year had a terrible visitation of locusts, the worst there has been for many years. An army of about ten miles wide of unfledged locusts was passing through the station for five days. They have, of course, done much damage; but fortunately the crops were so nearly ripe that they were able to be cut in advance of the invasion, but unless some properly organised attack is made upon the eggs before next year a disastrous visitation is anticipated. Millions I should say have been destroyed in the station of the unfledged insects, so that in many places the smell from the dead bodies is very bad, and in the district a great many wells have been polluted by the numbers of locusts fallen into them. The trains have several times been delayed for some hours by the inability to make way over the greasy masses of locusts crushed on the rails. I believe the authorities are thoroughly alarmed, and steps are being taken, it is said, to organise throughout the Province a methodically planned raid on the eggs.

I am, Sirs, yours truly,

Wimpole-street, June 15th, 1891. J. FAYRER.

A CRUISE IN THE MEDITERRANEAN.

To the Editors of THE LANCET.

SIRS,—I have recently returned from a cruise in the Mediterranean in one of the steamers that are advertised to make yachting cruises, and I have derived so much benefit from various trips, in the same vessel, that I am anxious that others should benefit by the same course. I was very much broken down in health when I made my first trip in the early part of last year. Since then I have been again to the Mediterranean, to Norway, the North Cape, and up the Baltic. The sea air, the variety of changes, the pleasant company one meets in the course of these cruises, all tend to the restoration to health of those who have suffered from various causes—from depression of spirits, nervous affections, attended by loss of appetite and want of sufficient sleep. Men coming on board with every appearance of a general break down of their constitutions in a few days begin to pick up, recover their spirits, join in such amusements as can be obtained on boardship, recover their appetites, and again begin to enjoy life, the change in them becoming very marked; and I know no more rapid means of recovery from sickness of any sort as the patient obtains fresh air, enjoys the advantages of change of scene, without undergoing any fatigue, and, when visiting the various ports, has all the advantages of a home, as he returns to the ship to all his comforts, instead of being in an hotel or having to undergo the fatigue of long railway journeys. I think if medical men knew of the great benefits to be derived from these sea trips, they would often advise their patients to seek this form of recovery to health and spirits, instead of sending them long railway journeys to Scotland, or again to the Continent. The amount of bad weather and rough sea is very small while on the trips to Norway. The sailing is entirely in smooth water in the fiords, and the air is most bracing and invigorating. I have derived such great benefit myself from these trips to sea that I am anxious that others should benefit in a like degree, and therefore address myself to you as being the best way of spreading the knowledge of this experience both to medical men and through them to their patients.—I am, Sirs, yours faithfully,

GEORGE H. RAY, M.D.,

June 15th, 1891. Surgeon-General (retired).

WHOOPING-COUGH AND MEASLES.

To the Editors of THE LANCET.

SIRS,—A few years ago I submitted the question in the medical journals whether whooping-cough ought not to be included in the term "contagious disease," as used in the Public Health Act, and whether persons suffering from the malady were not liable to prosecution under the Act if exposing themselves in public. It was quite clear to me that the time had come for the profession and the public to realise the importance of this question. As it has now been again raised in THE LANCET, it may be allowed me to strengthen your remarks by drawing attention to the mortality caused by whooping-cough, measles, and scarlet fever during the five years 1885–89. It will be seen from the Tables of the Registrar-General's Reports that the mortality from whooping-cough exceeded that of measles and scarlet fever respectively.

Mortality in England caused by Whooping-cough.

	Whooping-cough.	Measles.	Scarlet fever.
1885	13,106	14,495	6355
1886	12,936	12,013	5986
1887	11,251	16,765	7859
1888	12,287	9784	6378
1889	12,225	14,732	6698

I am disposed to think that a large number of infants die from whooping-cough, whose deaths are attributed to other causes, from the reason I pointed out some years ago, that infants do not whoop.

I am, Sirs, your obedient servant,

Savile-row, W., June 10th, 1891. ROBERT LEE.

THE HOUSING OF THE WORKING CLASSES IN RURAL DISTRICTS.

(FROM A CORRESPONDENT.)

THE first inquiry in a rural district under the Housing of the Working Classes Act was held at Ixworth, Suffolk, on Monday last (June 15th), by Lord Francis Hervey, M.P., on behalf of the West Suffolk County Council. The formal notice convening the meeting set forth that, the Thingoe Rural Sanitary Authority having applied to the County Council for a certificate for the adoption of Part III. of the Act, Lord Hervey had been directed to hold a local inquiry, and that all persons interested in the scheme might attend and give evidence Ixworth is an agricultural village with a population of 951, and contains 224 inhabited houses (Census, 1891). In an article which recently appeared in a London paper it was stated that "for insanitation and general decay it would be hard to find so many cottages as bad in any rural area in England." This, however, is an exaggeration, for unfortunately there are many villages in which the average dwelling of the agricultural labourer is far inferior to those at Ixworth. It must be admitted that there are many cottages in Ixworth which are really unfit for human habitation—old cottages built of lath and plaster, and covered with straw thatch, both walls and thatch being defective; some with only one bedroom, and that in the roof; floors of brick, damp and uneven; windows and doors rickety; privies with large cesspools near the houses and the wells; many without gardens and others without back doors. Notwith-

standing these serious defects, the sanitary authority does not seem to have taken any steps to improve matters until roused to action by the Labourers' Association. In February last, however, Mr. Kilner, the medical officer of health, reported that certain houses were overcrowded and dilapidated, and the rural sanitary authority took the necessary step to have the cottages condemned and closed. A further difficulty now presented itself: there was not a single available cottage for the families about to be displaced to move into, and the authority was petitioned not to carry the closing orders into effect until suitable accommodation had been provided. The owner of three-fourths of the land in the parish and many of the dilapidated cottages, having refused to erect any houses, pressure was again brought to bear upon the rural sanitary authority to adopt and put in force the Housing of the Working Classes Act, and it ultimately requested the County Council to grant it the necessary powers. At the public inquiry the authority tendered no evidence beyond the reports of their medical officer. The Labourers' Association, through their solicitor, had secured the services of a barrister, Mr. Theodore Dodd, and of Mr. Millington and Dr. Thresh. A systematic inspection of the cottages in the village had been made, and Mr. Dodd brought forward a number of witnesses to prove that many houses were unfit for habitation, that others were seriously defective in accommodation, that much overcrowding as a consequence existed, and that the health of the inhabitants suffered from the prevalence of these conditions. Evidence was also adduced showing that there was no probability of private enterprise providing the required accommodation. Mr. Millington and a local builder deposed that twelve cottages (three blocks of four each) could be erected for £1500, or for £1750, including half an acre of land to each cottage. These could be let for £6 per year, a sum more than sufficient to pay the interest on the investment. Assuming that this amount were borrowed and the repayment of the loan extended over forty years, the balance to be raised by a rate over the whole Union would be less than one-tenth of a penny in the pound. The inquiry, which was held in the evening in order to enable the labourers to be present, was largely attended, and not concluded until midnight.

This being the first inquiry under the Act, it is of much more than local interest, and it is sincerely to be hoped that the difficulties which have so often been stated to render the Act impracticable will be found to be more imaginary than real. As urgency was also pleaded, we may not have to wait until after the next election of guardians in April, 1892, before further steps are taken. Whatever may be the result, the march of events in the little out-of-the-way village will be watched with the greatest interest, not only by the medical boards of health in our rural districts, but also by all who have the welfare of the working classes at heart. The provision of better cottages and larger gardens will tend to keep the agricultural labourer in the villages and decrease the exodus into the already overcrowded towns, greatly to the advantage of both the rural and urban districts.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Dame Margaret's Home.

THE convalescent ward at Washington Hall (so generously presented by Sir Lowthian Bell a short time ago, and in future to be called "Dame Margaret's Home") was opened yesterday. The main portion of the building is intended for poor children—"waifs and strays"; but the ward set apart for children convalescent from the Royal Infirmary, and I hope other institutions, is likely to prove of great utility also.

Death Certificates by Unqualified Assistants.

A case of some importance came before the county magistrates at South Shields yesterday, in which an unqualified assistant was charged at the instance of the Registrar-General with giving a death certificate. It was shown that defendant, who lived at a branch practice four miles from his principal (who was also his father), gave the certificate, which had been signed in blank by his father, a qualified surgeon. For the defence a technical plea of guilty was put in, but it was urged in mitigation of penalty that the defendant was not like an unqualified person introduced to conduct the practice, but that he had assisted his father for three or four years, though he had not qualified, and that he had now retired from the practice and was preparing himself by study for examination. The Bench said they were not disposed to treat the case lightly, but as there were so many circumstances which to some extent palliated the offence, they would deal leniently with defendant by inflicting a fine of 20s. with costs.

Stockton and Middlesbrough.

It is stated that the hospital collection made on Sunday last in the various places of worship at Stockton amounted to over £100. The friendly societies of Stockton had a demonstration on Saturday in aid of their new Convalescent Home which is being built at Grange-over-Sands, and which it is fully expected will be ready to open in September next. The cyclists had a parade at Middlesbrough on Saturday last, when more than one thousand wheelmen attended; a collection taken *en route* for the Nurses' Home realised over £100.

Scarborough and Whitby.

I have good authority for stating that the outbreak of influenza which occurred at Scarborough and district a few weeks ago has subsided as rapidly as it rose, and the death-rate now is remarkably low. Very few cases have occurred during the past fortnight, and the town is regarded as being now in its usual healthy condition. The same applies to Whitby and Saltburn, there being a larger number of visitors at both these places than is usual at this time of year. The weather on the Yorkshire coast during the early part of this week has been showery at times, with gleams of pleasant sunshine, and the temperature has risen, allowing a good deal of out-door exercise to be taken.

Death of a Medical Coroner.

I regret to note the death of Dr. Charles Grabham of Pontefract, which took place on Saturday last from the effects of influenza and bronchitis. Dr. Grabham, who was in his fifty-third year, was a distinguished graduate of the University of London (M.B., Honours, and First Class, 1860); he had been coroner since 1872 for the Borough and Honour of Pontefract. Dr. Grabham contracted influenza a few weeks ago, and had almost recovered, but caught a chill on the 1st of this month in attending a funeral. Congestion of the lungs and bronchitis soon followed, to which he succumbed. Dr. Grabham retired from practice a few years ago.

Cumberland and Westmoreland.

The report of the Inspector of Mines for Cumberland shows that during the year there were ten accidents involving as many deaths. There were no fatal explosions of fire-damp, but three persons were injured by explosions in the county. From falls of roofs and sides four lives were lost. In the entire district there were 298 non-fatal accidents. There were five deaths in the metalliferous mines in the county. Kendal and district have suffered severely from the influenza, and at the last meeting of the sanitary authority the chairman and several of the officers and members were unable to attend, while most of the members present had been sufferers from the epidemic.

The treasurer of the Cumberland Infirmary, Carlisle, has received upwards of £500 towards the fund for the proposed enlargement of the accommodation for nurses in that institution. Under the will of the late Miss Nelson of Moorrow, Wigton, the infirmary becomes entitled to £1000 free of legacy duty.

Newcastle-on-Tyne, June 17th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

Health of Edinburgh.

AT the meeting of the Public Health Committee it was reported that during the month of May there were 438 deaths, making the death-rate 19·08 per 1000, as compared with 17·51 per 1000 during the preceding five years. As regards age, 33·10 per cent. of the total number were under five years, 23·74 per cent. between thirty and sixty years, and 26·02 above sixty years of age. Diseases of the chest

accounted for 37·44 per cent. of the whole, and zymotic diseases for 10·95 per cent. The birth-rate was 27·22 per 1000. During the month 453 cases of infectious disease were intimated; 107 patients were admitted into the City Hospital, 94 were discharged, and six died, and there remained at the end of the month 188. The cases at present in the hospital include 1 of typhus fever, 24 of enteric fever, and 44 of scarlatina. During the month 52,086lb. of unsound meat were seized or delivered up in the city. The mortality last week was 108, making the death-rate 20 per 1000. Diseases of the chest caused 50 deaths and zymotic diseases 10, of which 6 were due to whooping-cough. The intimations for the week were: typhoid fever, 5; scarlatina, 11; measles, 74. In Leith the number of deaths was 27, and the death-rate 20·60 per 1000.

Scottish Universities Commission.

At the meeting of the Commission on Monday evidence with regard to instruction in mental diseases was heard from Dr. Clouston and Dr. Yellowlees; and with regard to a proposed chair of Pathology in Glasgow University from Professor M'Kendrick and Dr. Joseph Coats.

Hospital Transactions in Edinburgh.

There has been some talk of late regarding the starting of Transactions both at the Royal Infirmary and the Royal Hospital for Sick Children, and it appears there is a prospect of this being realised, and that the two hospitals will publish a conjoint volume. Should this be done, much valuable material will be permanently preserved instead of, as at present, being only used for the temporary purposes of clinical lectures and ward instruction.

The British Association.

At a public meeting held in Edinburgh on Monday it was decided to recommend that the British Association, which meets in Edinburgh next year, should meet in the end of September.

The Infectious Diseases Notification Act.

The Police Commissioners of Paisley have unanimously resolved to adopt the Notification Act, to come into force on Aug. 1st.

Death of Dr. Smith-Shand.

Dr. J. W. F. Smith-Shand, Regius Professor of Practice of Medicine in Aberdeen University, died on the 12th inst. of apoplexy. He was physician and lecturer on clinical medicine at the Royal Infirmary, Aberdeen, and whilst of a singularly amiable disposition, was possessed of the professional experience and skill which made his advice much sought after in the north of Scotland.

Royal Infirmary, Dundee.

Mr. Thos. Maitland presided at the annual meeting recently held of the governors of this institution. The treasurer reported that the financial position (including an extraordinary expenditure of £1384 13*s.* 7*d.*) showed an excess over revenue of £1486 19*s.* 10*d.* The chairman, in moving the adoption of the report, stated that the work of the infirmary during the past year had been the highest on record. He at the same time intimated that a considerable sum would annually be required as extraordinary expenditure to supply, from time to time, modern and improved appliances. The report was approved.

A scholarship, affording free education at the Edinburgh School of Medicine for Women and at Leith Hospital, is offered by a lady to a suitable candidate wishing to devote herself to work as a medical missionary. Candidates are to send in their names to the secretary of the school, and the selection will be made by a committee of ladies.

June 16th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Royal College of Surgeons.

ON Thursday, the 18th inst., the Council will elect an additional Examiner in Ophthalmology and an Examiner for the diploma in Dentistry. Mr. Theodore Stack will be a candidate for the Vice-Presidency of the College next June.

Regius Professor of Surgery: University of Dublin.

The recent meeting of the Academic Council to appoint a successor to Mr. William Colles has been adjourned to next Monday.

Royal University of Ireland.

Her Majesty has appointed The O'Conor Don and Sir Patrick Keenan members of Senate of this University, in the room of Sir Robert Kane, M.D., deceased, and Rev. Dr. Woodlock, who has resigned.

The late Staff Surgeon Rae, R.N.

A marble tablet has been placed in Dungarvan Parish Church in memory of the late William Masters Rae, Staff Surgeon of Her Majesty's ship *Serpent*, lost on the coast of Spain in November last. The deceased gentleman, who was thirty-six years of age, belonged to Dungarvan.

Rabies.

An outbreak of rabies has occurred in Carlow among the deer at Oak-park, and the animals destroyed exceed 100 head. Before the rabid dog attacked the deer it bit three children, who have been sent to the Pasteur Institute at Paris for treatment at the expense of the Carlow guardians.

Cork North Infirmary.

Dr. E. Magner has been elected extern physician in the vacancy caused by the resignation of Dr. Cremen, and Dr. Richard Dalton has been unanimously appointed assistant physician to the extern department.

Mr. Malone, solicitor, has been elected coroner for the baronies of Dungannon.

Sir Charles Cameron has been elected President of the Irish Medical Association for the ensuing year.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Prophylactic Value of Early Excision of Hard Chancres.

THE advisability of excising a hard chancre at an early stage of its development is a moot point, some asserting, with M. Jullien, the utility of the measure as a means of preventing further infection of the system; while others—and these certainly form the majority—agree with our own Hutchinson, who maintains that the operation "can rarely be productive of good." M. Mauriac of the Hôpital du Midi believes with the English authority that any hopes of preventing the appearance of secondary manifestations of syphilis by an early excision of the primary sore are illusory. In support of this view of the question, M. Mauriac has recently given the details of a case in which a three days' old Hunterian chancre was excised, there being at that period no sign of glandular infection. On the morrow a fresh preputial chancre, harder even than the original one, appeared at some distance from the site of the latter. It was, in its turn, thoroughly excised twenty-four hours after its discovery. The two wounds healed kindly, but at the base of the cicatrices a characteristic induration developed, and the adenopathy, doubtful at the time of the operations, revealed itself in a very unambiguous form. Fifty-three days from the appearance of the first chancre, the patient was seized with nocturnal cephalalgia, rheumatic pains in the intercostal and diaphragmatic regions, together with vesperal fever and night-sweats. These symptoms were shortly succeeded by the appearance of a generalised papular syphilide on the body. An experiment of this kind being of more value than any amount of theory, I have, for that reason, deemed it worthy of record in the pages of THE LANCET.

Hysterical Chorea.

MM. Debove, Comby, and Chantemesse have already called our attention to the existence of the hysterical form of chorea, presenting all the classical characteristics of the typical "chorée de Sydenham," as St. Vitus's dance is frequently denominated in this country. At a recent meeting of the Société Médicale des Hôpitaux (June 12th) M. Laveran—well known as the discoverer of the parasitic micro-organisms supposed to be peculiar to malarial blood—reported two cases in which the symptoms of hysteria and chorea were so interwoven as to suggest a common origin. The first case is that of a quartermaster-sergeant, who, having much pressing work to do, sat up all one night to get through it, assisted by copious libations of strong coffee. On the following morning, having discovered an act of disobedience

on the part of one of his subordinates, he became furiously enraged, and was there and then seized with an attack of hysteria, with transitory aphasia. A little later there supervened choreic movements of the elbow and arm, these movements subsequently involving the lower limbs. The aphasia gave way to hysterical stammering with generalised hyperæsthesia, and hysterical attacks recurred at frequent intervals. This man had never previously exhibited signs of hysteria. In the second case, a wine-grower, who had but recently joined his regiment, was admitted into the Val-de-Grâce Hospital with the history of having suffered for the last two or three years from occasional involuntary movements of the limbs. The attack commences with a sensation of constriction of the chest and neck, and this is followed, without unconsciousness, by movements of the arms resembling those employed in the act of rowing. These movements last a few minutes, and are repeated several times during the attack. Hysterical stigmata are present in the shape of incomplete left hemi-anæsthesia and narrowing of the visual field in the left eye. From the study of these cases, and a careful analysis of the records of the Val-de-Grâce Hospital archives, M. Laveran arrives at the conclusion that male hysteria is decidedly on the increase. He states that there are at present in his wards at the Val-de-Grâce Hospital three well-marked cases—a large proportion, considering that all his soldier-patients are drawn from the ranks of the working-classes. MM. Raymond and Ballet, on the other hand, deny the increased frequency of hysteria in the male, opining that the apparent increase is really due to improved diagnostic methods. M. Ballet tells us that he has in his wards at the present moment about fifteen male hysterics. With regard to the nervous origin of chorea, MM. Perret and Devic have recently published the statistics of 235 cases of the disease tending to prove that rheumatism is not so common a starting-point as is generally supposed. They regard chorea as an essentially nervous affection in the majority of instances, and they believe that when met with in young girls, it may be merely a form of hysteria.

The New Medical Bill before the Senate: the State of Medical Education in France.

This new Bill, already passed by the Chamber, and the provisions of which I have already transcribed for the information of your readers, was duly presented to the Upper House on June 8th. A committee was forthwith appointed to report on it, this body comprising Professor Cornil (chairman) and eight other senators. The committee proceeded to the discussion of the article dealing with the abolition of the *officiat de santé*. Four of their number pronounced in favour of the maintenance of the second-grade diploma, while three others voted for its suppression. It was ultimately decided, at the suggestion of M. Cornil, to proceed to an inquiry on the subject, the opinion of the County Councils being taken thereon. *Apropos* of the suppression of the *officiat de santé*, the Association des Professeurs de Ecoles de Médecine de France has just signed a petition to the Senate, urging upon that august body the inexpediency of the proposed measure and the necessity of preserving intact and further fostering the preparatory schools of medicine scattered through the country. In protesting against the tendency to further centralisation, these gentlemen contend that at their schools, free as they are from the overcrowding inherent to metropolitan hospitals affiliated to faculties of medicine, clinical instruction is cheaper and more complete, and the despised *officier de santé* emerges from his *alma mater* armed with more practical and useful knowledge than the generality of "swell" M.D.'s. In their petition they draw a melancholy picture of the state of things at a large Faculty: of the scarcity of subjects for dissection, the aimless wanderings of the medical fledgling from amphitheatre to amphitheatre, the crowd around the patient at the hospital, those composing its rear guard craning their necks in their desperate efforts to cull information regarding the case, &c., &c. They make a strong point of the general absence of control over the studies of the aspirant at the Paris and other Faculties, and contrast this indiscipline with the order prevailing at humbler schools, where each student is personally known to his teachers. They state that last year no less than 150 foreign doctors were compelled to shake the dust of Paris off their feet and repair to Berlin, because the defective organisation of the Faculty of Medicine deprived them of the opportunities for study they had been led to expect at such a centre of learning. That the accusation formulated by the petitioners is in great part well founded is sufficiently proved by the fact that the creation in Paris of a Municipal School of Medicine independent of the unwieldy Faculty has for some time past been a subject much discussed. I propose on some future occasion to enlighten your readers on the methods actually in operation of conducting examinations at the Paris Faculty. Reform in this direction is urgently needed, and the arguments I shall adduce will, I doubt not, conquer the suffrages of those of your subscribers who have, irrespective of nationality, the true interests of medical education at heart.

Paris, June 16th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Fermentations and Infectious Diseases.

A LITTLE treatise on fermentations and infectious diseases, with special reference to Koch's treatment of tuberculosis, has recently been published by Dr. Eugen Dreher, formerly private lecturer at the university of Halle. The author, who is not a medical man, but a student and teacher of natural science, discusses not only Koch's method, but also the kindred methods of Pasteur, Behring, Kitasato, Brieger, and Karl Fraenkel, and the theory of vaccination. He traces the history of the theory of fermentation, stating the views of Berzelius, Mitscherlich, and Liebig, and dwelling on the important service to this branch of science rendered by Schwann and Pasteur, who discovered and determined the part played by organisms in fermentation. After referring to the resemblance between the phenomena of fermentation and those of the infectious diseases, he discusses the various theories of vaccination. As a Darwinite, he favours the view of Paul Grawitz, according to whom the immunity conferred by vaccination is due to the victory gained by the cells over the weakened virus, which victory strengthens the cells against the virus even in its unenfeebled form. Dreher accordingly opposes Koch's hypothesis of the manner in which tuberculin acts—namely, by coagulation necrosis. According to Darwin, kindred species often have qualities of the same kind, only stronger in some of them than in others. Dreher therefore suggests that inoculation with kindred bacteria of a less virulent nature might confer immunity against the germs of infectious diseases. I may add that the same author has recently published "three psycho-physiological studies," entitled "Darwinism and Archigony," "Debility, with reference to Hypnotism," and "Colour-Sensation and Colour-Blindness."

The Bethany Hospital.

Dr. Hans von Steinau-Steinrück, one of the ablest of the younger Berlin practitioners, has been elected to succeed the late Dr. Goltdammer as chief of the medical department in the Bethany Hospital here.

German Death-rates.

The death-rates of the principal German cities in the week which ended on the 16th ult. were as follows: Aix-la-Chapelle, 23·9; Altona, 17·2; Barmen, 23; Berlin, 19·9; Bremen, 16·5; Breslau, 28·7; Chemnitz, 28·5; Cologne, 20·3; Dantzic, 18·9; Dresden, 24·2; Düsseldorf, 23·5; Elberfeld, 18·7; Frankfort-on-the-Maine, 21·9; Hamburg and suburbs, 22·2; Hanover, 17·2; Königaberg, 24; Krefeld, 19·4; Leipsic, 20·2; Magdeburg, 21·8; Munich, 25·4; Nürnberg, 30·4; Stettin, 29; Stuttgart, 18·1. The death-rate of Amsterdam in the same week was 24·9; of Copenhagen, 24·1; of Dublin, 25·5; of Liverpool, 29·8; of London, 26·1; of Paris, 23·9. Of the Berlin deaths in the said week, one was due to scarlet fever, one to influenza, two to erysipelas, two to quinsy, two to puerperal fever, two to articular rheumatism, five to poisoning (including one suicide and two cases of delirium tremens), eleven to gastro-intestinal catarrh, twelve to whooping-cough, sixteen to diarrhœa, twenty to diphtheria, twenty-two to decrepitude, twenty-five to diarrhœa accompanied by vomiting, twenty-five to cerebral apoplexy, forty-two to pneumonia, and 102 to pulmonary consumption. Twelve persons committed

suicide. The population of Berlin at the end of that week was 1,596,865.

Dr. Richard Lemon, private lecturer on anatomy in the University of Jena, has been appointed professor.

Berlin, June 15th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Death of Dr. Fordyce Barker.

THE death of Dr. Barker removes from medical circles a somewhat notable figure. He began his career in New York as the Professor of Obstetrics in the New York Medical College (a school long extinct), and subsequently was transferred to the Bellevue School. Owing to a laryngeal affection, he early lost his voice, and therefore was obliged to discontinue attempts at giving courses of lectures. He occasionally gave clinical lectures, but with great difficulty. He was a very genial man, who won a large circle of friends both in and out of the profession. As a consulting obstetrician his advice was much sought. His work on "Puerperal Diseases" has always been very popular. Dr. Barker annually visited Europe, in the capitals of which he was widely and favourably known.

Endowment of Medical Schools.

There is an increasing and gratifying tendency in the direction of the endowment of universities, the benefits of which extend to the medical departments of these institutions. The Vanderbilt endowment of the College of Physicians and Surgeons has been followed by an act of incorporation of that school into Columbia College, which is now assuming the proportions of a university. The University of the City of New York is about to remove to a locality in the suburbs, where it can expand to its full proportions under the stimulus of recent endowment funds. This change will accrue to the benefit of the medical department, which will remain in its present advantageous position, but may become more closely connected with the university scheme of expansion. The medical department of the University of Pennsylvania has received contributions towards an endowment fund, which promises to take on large proportions. These are a few of the indications of growing interest in a more thorough system of medical education in this country.

Restrictions on Immigration.

The new law providing for the elimination of undesirable immigrants is now being applied with great stringency. The insane, the crippled, and feeble, who have no means of support, as also the criminals and those coming under contract for labour, are intercepted at the immigrant depôt, and at once returned to the ships which brought them to this port. The steamship companies are compelled to support these immigrants while in port, and to take them back on the return trip of their ships. This action of the Government has led steamship companies to enforce rigid rules in regard to the emigrants applying for passage. Since the enforcement of the law against the landing of dependent immigrants at this port it is surprising that so many insane and helpless have been found on every incoming ship.

The Marine Hospital Service.

Surgeon-General Hamilton has resigned his position as the head of this service, and accepted a professorship in the Rush Medical College at Chicago. During his incumbency of the office Dr. Hamilton devoted much time to sanitary matters pertaining to quarantine. His successor is Dr. Walter Wyman, who has been connected with the service for many years.

Death of Professor Joseph Leidy.

In the death of Professor Leidy the profession has lost one of its most distinguished members. His rank among scientific men was very high, especially in the field of comparative anatomy. He devoted his long life exclusively to teaching in the medical department of the University of Pennsylvania.

New York.

PHARMACEUTICAL SOCIETY OF IRELAND.—The following have obtained the licence to act as registered druggists:—Jno. H. Dudgeon, Thomas Jno. Field, Edgar S. Kee, James Mahon, William Miskelly, Thomas Spratt, Samuel Suffern, David S. Thomson, and Thomas G. Wilkinson.

Obituary.

HENRY GAWEN SUTTON, M.B. LOND., F.R.C.P.

BY the death of Dr. Sutton, to which we briefly alluded last week, the medical profession has lost one of its most remarkable members, and the London Hospital one of the most valued of its staff and teachers. Dr. Sutton was born at Middlesbrough, in Yorkshire. He came of a family of shipowners, and wished to follow a sailor's life. Deference, however, to his mother's great wish induced him to adopt the medical profession. He began his medical education at King's College, and took the degree of Bachelor of Medicine at the London University in 1858, never proceeding to the higher degree. Shortly after qualifying he began his medical career in general practice at Holloway. This, however, was not to his taste, or, rather, he had a craving for scientific work. He found the opportunity of prosecuting this at Guy's Hospital, where, both in the wards and in the pathological department, he diligently worked for some years. He found his greatest interest in the study of pathology, to which he devoted himself for the remainder of his life. At Guy's Hospital he was thrown much into contact with the late Dr. Barlow, Sir William Gull, and Dr. Wilks. With the two latter he afterwards kept up a close friendship Much of his work was published in conjunction with Sir William Gull. The two men had much in common in their breadth of view on pathological questions, but it is well known that the main work which was published in their joint name was the laborious and individual achievement of Dr. Sutton. Besides Sir W. Gull, two other men appear to have exercised a permanent influence on his mind. To the teaching of Dr. Todd must in some measure be attributed his belief in the value of alcohol in the treatment of disease, and which he carried into practice to a degree which some would regard as bordering on excess. To Dr. Wilks he was indebted for the basis of his pathological knowledge, and his independence of thought in the study of disease.

Dr. Sutton became a Member of the Royal College of Physicians of London in 1863, and was elected a Fellow in 1870. He was for some time assistant physician to the Victoria-park Hospital for Diseases of the Chest, where he did much valuable clinical and pathological work. He became medical officer of health to the parish of Shoreditch, and retained this office up to the time of his death. His appointment as Pathologist to the London Hospital in 1866 marked an important epoch in his life, and gave him the opportunity of carrying out his favourite study under the most advantageous circumstances, with a practically unlimited material at his disposal. He came to the hospital just at the time of the last cholera epidemic, which, it will be remembered, was mainly restricted to the East-end of London. In the post-mortem room and wards of the hospital, and at a temporary cholera hospital in Commercial-street, Whitechapel, of which he was placed in charge, he had a most valuable field of observation, which he utilised to the fullest, and embodied his researches in communications to the reports of the medical officer to the Privy Council, and in the London Hospital Reports. Shortly after his appointment as pathologist, Dr. Sutton was elected assistant physician to the hospital, and threw himself actively into all departments of work. Though not, at that time, entitled to beds of his own, some of his senior colleagues gave him full opportunities of clinical work. It was at this time that he pursued his inquiries on the expectant treatment, or rather natural history, of rheumatic fever, which were subsequently published in conjunction with Sir William Gull. At this period of his career his enthusiasm, activity, and power of concentrated work were only limited by time. He would frequently visit the wards at 9 A.M., remain for a couple of hours, go home to see a few patients, return to the hospital to lecture on pathology at 12.30, see out-patients from 1.30 to 3, make post-mortem examinations from 3 to 5 or 6, and then, after a frugal meal in a room over the post-mortem room, set to work again, writing out or dictating notes of the post-mortems he had made, and working with the microscope until late at night, and sometimes even till the small hours of the morning. He practically spent his day at the hospital. He continued this for many years, but increasing practice in later years did not

allow of such undisturbed clinical and pathological work, though to the end of his career he devoted a large share of his time to the hospital. In 1876 he became full physician, but this did not materially affect the scope of his work, whilst it freed him from out-patients' duty. For some years he visited the wards regularly every Sunday morning, with a few of the more ardent resident officers and visitors from other hospitals. At such times he was seen at his very best as an exact observer and inspiring clinical teacher Some of his then followers, who are now distinguished members of the profession, state that they received the most valuable and enduring part of their medical education on these Sunday mornings. For some years Dr. Sutton conducted all the pathological work of the hospital, which, owing to the great size of the latter, is exceptionally heavy, alone. Afterwards for many years he had the valuable coöperation of Mr. McCarthy, and later of Dr. Charlewood Turner. Three years ago the department was reorganised, and Dr. Sutton retained a merely nominal connexion with it. His pathological experience was enormous, and as a demonstrator he has rarely been excelled. The simple but impressive way in which he explained to the assembled students the conditions present in the dead body, and the processes which had brought about these changes, was quite remarkable; and, as a distinguished occasional visitor to the hospital observed to the writer since Dr. Sutton's death, "he seemed to make the organs live again." Few besides those who actually worked with him have any idea of the continuous, careful, and exact manner in which he prosecuted his researches, or can form any conception of the years of labour which preceded the publication of his investigations on Arterio-capillary Fibrosis, and the changes in the nervous system occurring in that condition. Received at first with a degree of scepticism which amounted to hostility in some quarters, they were based on a solid foundation of ascertained facts, and he lived to see them confirmed by independent workers, and accepted amongst the standard doctrines of pathology.

As a lecturer, Dr. Sutton was most impressive. The lectures were delivered extempore; his style was exceedingly simple, but he was at times very eloquent. His teaching was characterised by great breadth of view and poetic feeling, and at the same time that he inculcated broad principles he conveyed a large amount of detailed and practical information. His "Lectures on Medical Pathology," published in 1886, do scant justice to his teaching. His style was more fitted for oral delivery than for reading without much more literary correction and attention than the published lectures received. To some, indeed, they appear barely intelligible; but to those who are familiar with his mind and manner they recall, though imperfectly, his inspiring thoughts, and "the sound of a voice that is still." Full they are both of practica information and philosophical thought, inspired by a noble and poetic mind. For a few years Dr. Sutton gave the systematic lectures on the Principles and Practice of Medicine, but he found this less congenial than pathology, and he reverted to the chair of Pathology, which he held to the time of his death. Dr. Sutton was as noteworthy as a clinician as a pathologist. He was a most patient bedside investigator, and one of the most accomplished diagnosticians of our time. It is remarkable that, though somewhat deaf, he was a most accurate auscultator. He said he had to take more trouble to listen than other people, and certainly his efforts were rewarded by success. He was one of the earliest to recognise and publish observations on the presystolic mitral murmur, and on tricuspid bruits. In dealing with hospital patients he always respected the dignity of the sufferer, and in so doing exercised a valuable influence on the minds of the students trained under him. Just as he made his pathology essentially clinical, so he carried his pathology to the bedside and made the observers with him see in mind the changes working in the body. His writings, though not numerous, are each of them valuable contributions to medicine. He wrote the article on "Abscess of the Brain" in Russell Reynolds' "System of Medicine," and an important article on "Fibroid Degeneration of the Lungs" in the Medico-Chirurgical Transactions. His other important publications have been incidentally alluded to, but space does not allow their just discussion. His name will remain most associated with the subject of arterio-capillary fibrosis, and most fittingly so, as his writings on this topic display his three great characteristics—wide clinical experience, extensive pathological grasp, and patient, detailed work.

At one time Dr. Sutton took an active share in the management of the Medical School of the London Hospital, and was one of the powerful causes in its increased prosperity in recent years. It was mainly through his influence that the present College Board which governs the school, and is composed of six members of the house committee (laymen) and six members chosen from the staff and lecturers, was established, and which has been found to work most advantageously in the interest both of the hospital and school. Dr. Sutton, however, was by nature more fitted for inspiring and promoting undertakings than for practical administration, and he ceased after a time his connexion with the board, whilst retaining the greatest interest in all that concerned the real welfare of the students. Dr. Sutton was one of the physicians appointed to attend the nurses when sick. He most conscientiously and self-denyingly performed the duties devolving upon him, visiting the hospital daily to see urgent cases. In person, Dr. Sutton was of small stature. His features, especially in the upper part of his face, were delicately and beautifully chiselled, his eyes were bright, and his face usually wore a winning smile. He was somewhat shy and retiring in disposition, and this was increased by the deafness already alluded to. This infirmity shut him out to a great extent from general society and medical gatherings. Though retiring, he was by no means timid, and could be very outspoken when occasion required. His nature was extremely affectionate and sympathetic, and he exercised a most powerful and permanent influence on all, in and out of the profession, who were thrown into close association with him, obtaining not only their respect, but their loving regard. Actuated himself by lofty ideals, he exercised an ennobling influence on his associates His reading in his earlier and middle life was extensive in range rather than in amount, but in his later years his literary appetite was voracious. He was a great reader of poetry, both in verse and prose, Shakespeare, Burns, and Ruskin being his favourite authors, and he had highly artistic sympathies. He was a great lover of nature, and, as in the case of many gentle natures, his favourite recreation was fishing. It was not so much for love of the sport as for the environment angling secured him. To show how greatly he was influenced by nature, a quotation from his "Medical Pathology" will suffice: "Whilst endeavouring to feel my way into the rhythm of the world I one day stood near a running brook and waited until my senses were governed by its rhythm; then I found I was inwardly, and in a little while outwardly, moving to it. The brook got me into tune, and away I could go. As I got into tune and time and rhythm with the brook, my heart's and other muscular movements were toned, agreed accordingly. My senses were governed by the mighty, undeviating rhythm, and my heart and limbs moved marvellously 'easy,' the government of the great being the easiest government." There was a curious mixture of the mystical and the practical, and a delight in paradox, in the organisation of Dr. Sutton's mind. The mystical element, which made him difficult to understand to many, increased upon him in his later years. He was essentially a deeply religious man, but his religion had nothing sectarian in it. It inspired his life and influenced his work. Whatever he did was done with the noble aim of helping poor, struggling, suffering humanity; and he might most suitably have borne as his own the motto of his hospital—"Homo sum: humani nihil a me alienum puto." Dr. Sutton's constitution was severely shaken about thirteen years ago by the illness and death of his daughter, Mrs. Pantin. Though in the course of some years he regained his health, he was never quite the same man afterwards, and never again slept in his house in Finsbury-square, where she died. He had built himself a house, beautifully situated, at Sevenoaks, and went backwards and forwards to town daily to his work. His last illness was a short one. He was attacked by influenza, which was followed by bronchitis, and probably broncho-pneumonia. He knew he was to die, and was glad to feel he was going to be at rest. His old friend Dr. Wilks came to see him several times at his own request. Miss Lückes, the matron of the hospital, superintended the nursing, whilst the immediate nursing was, at his own desire, committed to Nurse Brewster. He had the devoted care of his son-in-law, Dr. Savage. His

daughters were at his bedside, and his end was peace. He died at the early age of fifty-five. Dr. Sutton leaves a widow and two married daughters, not so much to deplore their loss as to feel grateful that he is peacefully at rest after such a useful life. Though no invitations or notices of the funeral were sent out, and many of his friends did not know even of his illness, a considerable number of his colleagues, friends, and old and present pupils assembled to pay the last tribute of respect to the remains of a truly great and worthy man.

"An Old Pupil" submits the following tribute to the deceased physician:—In the late Dr. H. G. Sutton we have lost one of the most original of the medical thinkers of the day, and one who, owing to his retiring habits and indisposition to write, was less widely known than he deserved. He will, however, live through the influence he exerted on his pupils, whose characters he did much to form. Many old London Hospital students to-day, though they may differ from him in some matters, yet reckon his example as having an important share in forming their medical habit of mind. He possessed a rare insight into bodily—and, indeed, mental—processes, and used his knowledge of morbid anatomy, which has perhaps been seldom equalled in its range, with a full sense of the difference (sometimes overlooked) between morbid results and morbid action. The command of the mortuary at the London Hospital during many years gave him vast opportunities, and his manner of conducting and demonstrating a necropsy was most admirable. With an easy colloquial delivery, he would show the why and wherefore of each phenomenon, and draw upon his stores of experience to illustrate and explain. His teaching was characterised by great simplicity. Pathology was reduced, in his annual courses of lectures, to its simplest elements; the language was such as a child might almost follow, and abstruse terms and long names were sedulously avoided. To him the processes of disease seemed to be mentally visible, and he taught his hearers to see them in like manner. Above all, he taught his pupils to think, and both in the deadhouse and the wards, and in consultations in private, he would use the same simple Socratic method of discourse, observing facts and drawing his inductions from them. The writer well remembers a discussion in the post-mortem room one afternoon many years ago between Dr. Sutton and another distinguished physician still living, on the relative merits of the inductive and the deductive method, Dr. Sutton arguing for the former. In his philosophic tone of mind Dr. Sutton bore an obvious resemblance to the late Sir W. W. Gull, with whom he was associated in some of the very scanty writings he has left. It was a saying at his own hospital in regard to these—I know not with how much truth—that in their joint work, "Sutton loaded the gun and Gull fired it." From another aspect a comparison might be drawn between Dr. Sutton and Dr. Matthew Baillie, nephew to the Hunters. Both were devoted to morbid anatomy, and based their medical practice upon it, becoming very skilful diagnosticians, and therefore sound and successful in treatment; but both had a limited range of therapeutics and little of that wealth of varied resource which generally marks the popular practitioner. And although in temperament they differed much, yet both were sensitive men, of little bodily vigour, of retiring habits, and without ambition to attract the public gaze. Had Dr. Sutton, like Baillie, written early in his career a work on pathology, it is not improbable that his profound knowledge of the subject would have won for him a fame little less than that of his great predecessor. Long will his memory linger in the living thought of many of his old pupils as that of a great teacher to whom they owe much of what they are.

BRADFORD EYE AND EAR HOSPITAL.—The annual report for 1890 shows that 3462 cases of diseases of the eye and 490 cases of diseases of the ear, a total of 3952 cases, had been treated during the year; 1935 came from Bradford and 2017 from other places. The attendances of out-patients were 14,740, the number of in-patients 424. The average stay in the hospital was 17·72 days. 432 major operations were performed, of which 70 were extraction of senile cataract. In nearly all these cases preliminary iridectomy was done about six weeks before the extraction. There was not a single case of suppuration after operation. The mastoid antrum was opened with Schwartze's chisel five times. The finances of the hospital are in a satisfactory condition. The annual expenditure was £1983.

Medical News.

ROYAL COLLEGE OF SURGEONS.—In our list last week of gentlemen who received the Fellowship of the College, Mr. A. W. Hughes should have been described as M.B.Edin., not as L.R.C.P.Lond.

AN AMERICAN MEDICAL TEMPERANCE ASSOCIATION has been started at Washington. Dr. Nathan S. Davies of Chicago is the president. Its object is "to advance the practice of total abstinence in the medical profession, and to promote investigation as to the action of alcohol in health and disease."

HANDWRITING IN PRESCRIPTIONS.—It is stated that the Austrian Minister of the Interior has recently issued an ordinance that the burgomasters of all communes must exercise strict supervision over the medical men practising within their jurisdiction in the matter of legibility of prescriptions. They are charged to see that every prescription is clearly and legibly written in all its parts, so that there may be no doubt as to the remedy, the dose, or the signature.

PRESENTATIONS.—A few days ago, at a dinner of the editorial staff and others connected with the *Medical Press*, Mr. A. A. Tindall was presented with a portrait of himself, to commemorate the twenty-fifth anniversary of his management of that journal.—Mr. Rowland Smith, M.R.C.S., of Cobham, Surrey, has been presented by the members of Court Hand and Spear, A. O. Foresters' Club, after thirty-one years' service as surgeon of the court, with a gilt ormolu clock and a purse.

QUEEN VICTORIA NURSING INSTITUTION.—The second annual meeting of the supporters of this institution was held last week at the Town Hall, Wolverhampton. The Archdeacon of Stafford occupied the chair. The annual report for the past year showed that the institution was making satisfactory progress. There were on the staff sixteen fully trained nurses. In the course of the year nurses had been supplied to 121 families, representing 434 weeks of nursing. The demand for nurses was so pressing that steps were being taken to augment the staff, to meet future requirements. The cash statement showed a balance in hand of £528 1*s.* 6*d.*

ST. BARTHOLOMEW'S HOSPITAL.—A meeting of those interested in the foundation of a memorial to the late Dr. Matthews Duncan was held in the Great Hall at St. Bartholomew's Hospital on Thursday last, Sir Sydney H. Waterlow, Bart., in the chair, when the following resolutions were adopted:—(1) "That a gold medal or other prize for proficiency in Obstetrics and Gynæcology be founded at St. Bartholomew's Hospital, to perpetuate the memory of Dr. Matthews Duncan, and that it be named the 'Matthews Duncan Medal' (or Prize)." (2) "That a copy of the bust by Mr. Bainsmith, now in the possession of Mrs. Matthew Duncan, be obtained and placed in the library of the Medical School." (3) "That those present form a committee, with power to add to their number; and that Sir Sydney H. Waterlow be requested to act as chairman, and Mr. Bruce Clarke and Dr. Griffith as honorary secretaries."

IRISH MEDICAL ASSOCIATION.—The following office-bearers have been appointed for the ensuing year:—*President:* Sir C. Cameron. *Vice-Presidents:* H. MacDonnell, *F. G. Fitzgerald, P. J. MacNamara, J. R. Kinkead, H. G. Croly, W. Carte, S. Gordon, the President, and Vice-President of the College of Physicians. *Council:* Drs. Ashe, Sir J. T. Banks, A. Benson, W. Bennett, R. Browne, Borne, Burnside, Chapman, *Delahoyde, T. Donnelly, *Falkiner, Franks, Foy, Gibson, E. Hamilton, R. Hayes, *Hepburn (hon. sec. to the council), *A. H. Jacob, W. G. Jacob, Dillon Kelly, J. B. Kelly, J. Kenny, R. Leeper, C. McDowell, G. Mackesy, *Meldon (chairman of council), *H. Muichin (hon. treasurer), Olpherts, *Oulton (hon. sec.), P. C. Smyly, *Stoker, Sir Wm. Stokes, W. Thomson, Usher, and W. J. Wheeler. *County Council:* Drs. Gray, Stawell, Caldwell, MacNamara, Greene, Warnock, A. Douglas, Purcell, Gunning, Fletcher, Falvey, Johnson, T. Browne, Pentland, Gelston, G. Thompson, Wilson, Moore, O'Connor, Ringwood, Tabuteau, White, Laird, Morton, Duncan, Cutler, Kerrigan, G. Greene, and Bleakeley. (*Committee of council.)

HOSPITAL FOR EPILEPSY AND PARALYSIS, REGENT'S PARK.—Lord Robartes, in presiding at the annual meeting on Saturday afternoon, and moving the adoption of the annual report, alluded to the fact that an anonymous gift of £1200 had enabled the committee to purchase the unexpired ten years' lease of the building.

THE SANTA CLAUS HOME, HIGHGATE.—This Home was opened last week by Lady Lucy Hicks-Beach. It is in connexion with the Santa Claus Society, and intended chiefly for cases of hip and spinal diseases, and for children who require slight surgical treatment and nursing, cases which are frequently ineligible for convalescent homes.

SICK NURSING AND MOTHERS' HELP SOCIETY, STALYBRIDGE.—This charity is making satisfactory progress in its usefulness. The ninth annual report shows that in the past year 150 new cases were tended and 4719 visits paid. The mothers' help department commenced in 1884, and has proved a great boon to the poor recipients of its benefits. The cash statement shows a small balance in hand.

NEW INFIRMARY, HALIFAX,—At a meeting of the General Committee held on the 12th inst., an outline was submitted of the internal modifications of the adopted plans, as approved by the executive committee. A resolution was carried approving of the scheme. The total amount of capital promised up to that date was £55,000. Of this, £15,000 has been expended in land. The estimated cost of the buildings is £50,000.

COTTAGE HOSPITAL FOR MIRFIELD.—Mr. Charles Wheatley, J.P., of Sands House, Mirfield, is about to erect at his own cost a cottage hospital for this township. It will be a memorial of the late Mrs. Caroline Wheatley, wife of the late Mr. Richard Wheatley, of Royds House. The site of the building is central and eligible, and the coöperation of the local medical practitioners in the prospective usefulness and benefits of such a hospital has already been made known.

SUICIDE OF A MEDICAL PRACTITIONER.—An inquest was held on the 3rd inst. by the borough coroner, Portsmouth, concerning the death of Mr. William Luard Wright, L.R.C.P., of Pendennis-street, Southsea, aged twenty-nine. It appeared that the deceased was not in practice, and resided with his father. He had lately laboured under certain delusions and depression. On the previous day he was found in his room in an insensible condition, and a glass measure which had contained prussic acid was lying near him. The medical testimony was that poisoning by that acid was the cause of death.

GENERAL HOSPITAL, LAUNCESTON. — The annual report for 1890 shows that the hospital and its management are in a more satisfactory condition than at any previous period since they have been under the control of the board. To meet a long-felt requirement a dental department has been formed. An important and desirable addition has also been made in the arrangements by setting apart special wards for sick children. The need of a convalescent home in connexion with the hospital is severely felt. The statistics of the patients for the past year show that the admissions were 886, discharges 790, and deaths 68. Chloroform had been successfully administered 155 times during the year.

MEDICAL NOTES IN PARLIAMENT.

The Alleged Death from Vaccination.

IN the House of Commons, on Thursday, the 18th inst., Mr. Herbert Gladstone asked the President of the Local Government Board whether he would endeavour to ascertain whether the case of Emily Maud Child, who died at Leeds on the 1st July, 1889, according to the coroner's jury, "from syphilis acquired at or from vaccination," had been the subject of further medical investigation by the Royal Vaccination Commission; and whether such investigation had confirmed the view that the disease from which the child died was due to vaccination.—Mr. Ritchie said: The case of Emily Maud Child has been the subject of further investigation by a medical man appointed by the Royal Commission on Vaccination, and I am informed that he reported that there was no evidence of syphilis in either of the parents, and no evidence of inherited or acquired syphilis in either of their two elder children; and that the accounts he obtained of the deceased child, Emily Maud, did not suggest to him that it was the subject of inherited syphilis. I may add that the case is still under investigation by the Commission.—Mr. Summers asked whether the report would be published.—Mr. Ritchie said that the report had been furnished to the Commission, and he understood that the gentlemen who made it would undergo examination at the hands of the Commission.

Influenza.

Mr. Howard Vincent asked the President of the Local Government Board when the report in preparation by the scientific officers of his department upon the recent epidemic of influenza would be laid upon the table.—Mr. Ritchie: The report on the influenza epidemic of the past year has been laid on the table of the House. The report is in type and the printing is being proceeded with. I have requested that this may be expedited as much as possible.

The Consumption of Opium.

Mr. Samuel Smith asked the Under Secretary of State for India whether his attention had been drawn to a paragraph in the 25th Statement, with reference to the enactment of new rules for regulating the production of opium, and whether the Government would draw the attention of the authorities in other parts of India to the desirability of closing the shops where prepared opium is smoked on the premises, as has already been proposed in the Punjab.—Sir John Gorst said the Local Government had reduced the opium smoking licences, and was considering further reductions. The attention of the Government of India would be invited to the question of the hon. member. He would be happy to show the hon. member the new opium rules, and he could then consider whether it would be necessary to lay them on the table.

Royal British Nurses' Association.

Mr. Paulton asked the President of the Board of Trade whether the application of the Royal British Nurses' Association for permission to omit the word "Limited," if registered under the Companies' Act, had been refused by the Board of Trade; if so, whether he would state the reasons for that refusal, and whether he would reconsider the decision.—Sir Michael Hicks-Beach said he had given careful consideration both to the application and the representations made in opposition to it, and he was not prepared to reconsider his decision.

THE METROPOLITAN HOSPITALS INQUIRY.

Uniform Hospital Accounts.

AT the Committee on Monday, Mr. Williams gave evidence on the part of the committee of management of Guy's Hospital. He came to explain a statement made in the evidence of Mr. J. W. Gordon concerning two items that appeared in Guy's Hospital report as £587 17*s.* 19*d.* and £815 18*s.* 13*d.* Mr. Williams explained that the "19*d.*" and "13*d.*" were misprints, the mistake being attributable to the printers. He produced a letter from the printer acknowledging the mistake. He further produced the original documents signed by the auditors to show that these figures did not exist in them. In answer to Lord Cathcart, the witness said it was a very odd and stupid blunder.

Poor-law Infirmaries.

Dr. Bridges, Poor-law Inspector for the Metropolitan District, was next examined. He explained the internal organisation of Poor-law infirmaries, and expressed the opinion that it would be a great advantage if the services of an honorary medical staff could be obtained for infirmaries, as in the case of hospitals. The difficulty of opening the infirmaries to an honorary staff was that in most cases the infirmaries were situated at such great distances that it would be difficult for the leading consulting physicians and surgeons to attend. He mentioned several infirmaries where the matrons were not hospital-trained nurses. In these cases the subordinates knew more about the profession than their superintendents. Such a state of matters destroyed the influence of the matron, inasmuch as the trained nurses looked down upon her. Altogether about 883 nurses were employed in those infirmaries. Within the last ten years the prejudice against the employment of a trained matron and of trained nurses had very much diminished, and he had no doubt that if all the untrained matrons were to disappear to-morrow, almost all the boards of guardians would elect trained matrons; but unfortunately they were saddled with the old officers. The Poor-law infirmaries served the purpose of treating chronic cases after they had been discharged from the hospital, and who would otherwise die for want of care. He had thought a great deal about how the Poor-law dispensaries might be linked with other charities. He thought that every facility ought to be given for making attempts in that direction. Where a Poor-law infirmary was situated not very far from a general hospital—as, for instance, in the case of the Whitechapel Infirmary and the London Hospital, which is nearly opposite to it, or in the case of St. George's Hospital and the Chelsea Infirmary, or of the Lambeth Infirmary and St. Thomas's Hospital—in such cases as these he thought it would be possible to have some arrangement by which the assistant physicians or surgeons—that is, the honorary staff of the general hospitals—could go at certain definite times and consult with the medical superintendent as to the more serious cases, bringing, possibly, with them a certain number of senior students.

Mr. Charles Gross, medical superintendent of St. Saviour's Infirmary, East Dulwich, which contains 786 beds, expressed himself in favour of having trained nurses as matrons in the infirmaries. It was not necessary for people to become paupers before being treated in the infirmaries. The cases were mostly those which could not be taken into a general hospital. The patient may be earning good wages, as much as 30*s.* a week, and be suddenly stricken down with an accident, and he comes into the infirmary. He would not be taken into the hospital because his case might not be serious enough or interesting enough.—By Lord Thring: The effect of these infirmaries in regard to the curing of the disease is greatly to tend to pauperise the people.—Yes, and prevents them from going into provident clubs.—Lord Thring: Yours is very startling evidence. Take the case of a gas stoker earning 30*s.* a week; if the man were thrown on his own resources, as he would have been in former days, he would not have got out-door relief: he would have gone on credit, and his doctor would have managed him on credit; and now you say, quite justly, that though the man is destitute in one sense, he would be able to pay it back in a week, and under those circumstances the man comes into the hospital.—The Witness: Yes; several times we have a case of delirium tremens,

and we know the man is in good work. The man comes in for a fortnight, and is sent away perfectly well, and he has done nothing at all for it. Sometimes money may be found on the patients, and that is used to defray the cost of his maintenance. Only the other day a man came into the hospital with £9 in his pocket.

The London Throat Hospital.

Mr. Frank Horne, secretary of the London Throat Hospital, situated in Great Portland-street, stated that the hospital had been established in 1886. It had not yet received any grant from the Hospital Sunday Fund, but an application would be made this year, he hoped successfully.

Central London Ophthalmic Institution.

Mr. William Abraham, secretary of this institution, in 238A, Gray's-inn-road, was next briefly examined. The hospital was founded about fifty years ago. Last year it received £62 10s. from the Hospital Sunday Fund and £41 1s. from the Hospital Saturday Fund.

The Committee then adjourned.

Wormwood Scrubbs.

On Thursday, Mr. R. Lann, F.R.C.S.Ed., medical superintendent of the Poor-law Infirmary at Wormwood Scrubbs, was examined, and gave evidence on the manner in which the Poor-law system of relief was worked, generally confirming the statements made by previous witnesses. He objected to students attending these institutions except under their instructors, who might demonstrate the cases to them. The out-patient department supplied all the material generally met with in these infirmaries. Asked whether it was the fact that the general hospitals, established for the poorest of the poor, really did not receive the poor, and whether that was not opposed to the principle of charity, the witness replied that that was the fact. Some of the cases were of so loathsome a character that the sufferers were not taken into a general hospital, and came to the Poor-law infirmaries.

Bethnal-green Workhouse.

Dr. Knox, medical officer of Bethnal-green workhouse, which was built about fifty years ago, was next examined. He said that the hospital contained 495 beds, the tenants of which were attended to by a day staff consisting of one superintendent, eleven nurses, two male and two female imbecile attendants, and three infirm ward nurses. The night staff was composed of eight ordinary infirmary nurses, one male and one female imbecile attendant, and one female infirm ward nurse. The matron had not received any hospital training, and only one of the nurses held any hospital certificate. He contended that the system of pauper help was a crying evil. They had as many as eighty paupers employed during the winter. He computed that each nurse had about four wards to look after, and in some cases as many as six on different floors. The average number of beds to each ward was nine or ten.—Lord Cathcart: I suppose you enjoy at Bethnal-green the repute of being the very worst establishment of this kind in the metropolis?—Yes, I believe so.—And the whole thing ought to be amended, or abolished, or reconstituted to-morrow, if that were possible?—Abolished, my lord. I think it would be impossible to amend it.—In fact, the whole thing is a crying and a notorious evil, is it not?—That is so, in my opinion. Continuing, the witness said he had performed serious operations, such as amputations and laparotomy, successfully in that hospital, with such assistance as he provided himself. With regard to a site for a new infirmary, the guardians had been looking out for one ever since he had been appointed some eleven years ago. In his opinion it was a pity that the guardians had not been able to secure that space of forty-two acres known in the district as the "Poors' Land."

Paddington Infirmary.

Dr. Thomas Savill, medical superintendent of Paddington Infirmary, said that the administration, discipline, and management of the infirmaries generally were very good, but there were two exceptions. The matrons were not always hospital-trained nurses. Although the matron in Paddington Infirmary was hospital trained, perhaps not twelve out of the twenty-four matrons had had any such training. The medical staff was insufficient. Comparing the infirmary with St. Mary's Hospital, which was almost of the same size, he said the medical staff consisted of nine residents and nine visitors, whereas in the infirmary there were only three residents. He had not alluded to the numbers of students who help in the surgical cases. The hospital had many surgical cases but few nervous cases, while the reverse was the case in the infirmaries. It had been suggested that the infirmaries should cooperate with the hospitals and that the staff of the hospital might assist by coming and seeing the cases at the infirmaries. That kind of help was not what was required. The medical staff of the hospital had enough work to do already, and there were a great many men disconnected with any institution who ought to be considered. They required more residents who would do the drudgery of taking notes of the cases. The medical officers did not want any more masters, they required more servants, more senior students to investigate cases and carry them into effect the treatment prescribed by the officer. They also required true consultants who would come when called upon and see difficult cases. There were at present 12,170 beds (not including the sick wards) in the twenty-four infirmaries in London, which means 50,000 patients in a year. The whole of that material is practically wasted so far as medical education is concerned. Regarding the quality of the cases, he maintained that they were just the kind of cases with which men ought with profit to become acquainted. The patients were all ill, bedridden, and not of the same type at all as those met with at the out-patient department of a general hospital—cases of rheumatism, bronchitis, and all stages of nervous diseases; and students might with very great advantage give their services in return for the advantage they would derive from these institutions. It had been argued that this would lead to increase in the expenditure, and that the patients did not like it, but at Paddington the experiment had been tried. It was the only infirmary which had tried the experiment of teaching from the cases, and the lessons learned from the experiment were that the patient did not mind the examination by students, that it increased the interest of the medical staff, and that the cases were properly investigated.

The Committee then adjourned.

METROPOLITAN ASYLUMS BOARD.

Return of Patients remaining in the several Fever Hospitals of the Board at midnight on June 16th, 1891.

Hospital.	Beds occupied.						Total accommodation.
	Scarlet fever.	Diphtheria.	Typhus fever.	Enteric fever.	Other diseases.	Total.	
Eastern Hospital	159	53	4	32	..	248	445
North-Western Hospital	119	32	..	12	..	169	142
Western ,,	132	18	..	12	1	163	234
South-Western ,,	135	22	..	10	1	168	340
South-Eastern ,,	122	13	..	11	2	148	164
Northern ,,	155	11	..	..	..	166	190
Totals	819	149	4	77	4	1053	1921

SMALL-POX.—*Atlas* hospital ship, 5.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

APPLEGATE, J. W., L.R.C.P. Lond., M.R.C.S., has been appointed House Surgeon to the Dewsbury and District Infirmary.

BEHRENDT, M. R. J., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Scunthorpe Urban Sanitary District of the Glandford Brigg Union, vice Mecredy.

BLAIKIE, A. B., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the First Sanitary District of the Oswestry Incorporation.

BROWNING, B., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Melcombe Regis District of the Weymouth Union, vice Tizard, deceased.

CARTWRIGHT, J. P., M.R.C.S., has been appointed Medical Officer for the Town District and the Workhouse of the Oswestry Incorporation.

CHAPMAN, C. W., M.D. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed Honorary Physician to the Farringdon General Dispensary (corrected notice).

CROMBIE, JOHN, L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer and Public Vaccinator for the Blyth District of the Tynemouth Union.

DAVIS, A. N., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Superintendent of the Plymouth Borough Lunatic Asylum.

GAY, WILLIAM, M.B., C.M. Edin., has been appointed Medical Officer for the Boxmoor Sanitary District of the Hemel Hempstead Union.

GEORGE, C. F., M.R.C.S., has been reappointed Medical Officer for the Blyborough District of the Gainsborough Union.

GORE, W. R., M.B., B.Ch. Irel., has been appointed Medical Officer for the Hanmer Sanitary District, Salop, vice Bookey, deceased.

GRINDROD, J. A., M.R.C.S., has been reappointed Medical Officer, Norden, Rochdale.

HALL, ARTHUR J., B.A., M.B. Cantab., L.R.C.P. Lond., has been appointed Joint Lecturer on Physiology and Demonstrator of Practical Physiology at the Sheffield School of Medicine, vice Dr. Theo. Thomson and Mr. F. Harrison, resigned.

HARRISON, EDWARD, M.A., M.B. Cantab., F.R.C.S. Eng., has been appointed Honorary Assistant Surgeon to the Hull Royal Infirmary.

HOWDEN, JAS. C., M.D. Edin., has been reappointed Medical Superintendent of the Royal Lunatic Asylum, Montrose.

JONES, W. R., M.D., C.M. Glasg., has been reappointed Medical Officer for the Devynnock District of the Brecon Union.

KARKEEK, P. Q., M.R.C.S., has been reappointed Medical Officer of Health for Torquay and St. Mary Church.

KINGDON, E. C., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Third District and the Workhouse of the Holsworthy Union, vice Symons.

LIVINGSTON, J. L., M.D., C.M. Irel., has been appointed Medical Officer for the Workhouse and Sanitary District of the Hursley Union, vice Chapman, resigned.

MACDONNELL, LUCIUS G. A., M.B., B.Ch. & B.A.O. Univ. Dub., has been appointed Assistant House Surgeon to the Halifax Infirmary.

MCDOUGALL, H. A. H., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer for the Wincanton District and the Workhouse of the Wincanton Union.

MACGILL, GEORGE, L.R.C.P., L.R.C.S. Edin., has been reappointed Medical Officer for Wuerdle-and-Wardle.

MACGREGOR, ALEX., M.B., C.M. Aberd., has been appointed Medical Electrician at the Royal Infirmary, Aberdeen.

MARSDEN, R. S., M.B., C.M. Edin., has been appointed Medical Officer of Health for the Malton Rural and Urban Sanitary Districts, vice Young.

REES, D. V., L.R.C.P. Lond., M.R.C.S., has been reappointed District Medical Officer of the Brecon Union.

RIDDELL, JOHN S., M.B., C.M. Aberd., has been appointed Assistant Pathologist to the Royal Infirmary, Aberdeen.

ROCKLIFFE, WM. CRAVEN, MA., M.B. Cantab., M.A., M.D. Dub., M.R.C.S., L.S.A., has been appointed Honorary Ophthalmic Surgeon to the Hull Royal Infirmary.

ROWLEY, C. O., M.R.C.S., has been reappointed Medical Officer for the Second Sanitary District of the Barnsley Union.

SCOTT, WALTER, M.B., C.M. Edin., has been appointed Medical Officer for the Bewdley District of the Kidderminster Union, vice Webster, resigned.

SKARDON, C. C., L.S.A., has been appointed Medical Officer for the Evershot District of the Beaminster Union, vice Weir, resigned.

SMITH, ROBT. ARTHUR, has been appointed Assistant House Surgeon to the Rotherham Hospital and Dispensary, vice H. G. L. Allford, M.R.C.S., L.R.C.P., resigned.

SMYTH, W., M.B., C.M. Edin., has been appointed Medical Officer for Amble, Alnwick Union.

SOUTAR, ROBT., M.B., C.M. Aberd., has been reappointed a Medical Officer of the Royal Infirmary, Montrose.

STAUNTON, M. C., M.B., C.M. Irel., has been appointed House Surgeon to the Mater Misericordiæ Hospital, Dublin.

STENHOUSE, THOS., has been appointed Public Analyst for the Borough of Clitheroe.

STEPHENSON, S. H. A., M.B., F.R.C.S. Edin., has been reappointed Medical Officer of the Ophthalmic Central London District School, Hanwell.

STONE, VALENTINE, M.D. St. And., L.R.C.P.L., F.R.C.S. Edin., has been reappointed a Medical Officer of the Royal Infirmary, Montrose.

SUCKLING, C. W., M.D. Lond, M.R.C.S., M.R.C.P., has been appointed Consulting Physician to the Children's Hospital, Birmingham.

TAYLOR, SHEPHARD T., M.B. Lond., L.R.C.P., M.R.C.S., has been reappointed Medical Officer for Cromer.

THOMPSON, A., M.D. St. And., M.R.C.S., has been reappointed Medical Officer for the Grange-over-Sands Urban Districts.

WALSH, ROBERT W., M.R.C.S., L.S.A., has been appointed Honorary Surgeon to the Hulme Dispensary, Manchester.

WARD-HUMPHREYS, HERBERT, L.R.C.P. Lond., M.R.C.S., has been appointed Surgeon to the Cheltenham Children's Hospital.

WAYMAN, C. P. S., M.R.C.S., has been appointed Medical Officer for the Third District of the Aylsham Union.

WEIR, A. M., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Malvern Sanitary District.

WEIR G. W., M.D., C.M. Irel., has been appointed Medical Officer of Health for the Garrow Urban Sanitary District of the South Shields Union.

WHITAKER, G. H., M.R.C.S., has been appointed Medical Officer for the Fourth District of the Loddon and Clavering Union, vice Johnston, resigned.

WHITE, WALTER, L.R.C.P., L.R.C.S. Edin., has been reappointed Medical Officer for the Darton Sanitary District of the Barnsley Union.

WHYTE, AND., M.D., C.M. Aberd., has been reappointed District Medical Officer of the Brecon Union.

WILSON, GEORGE, M.R.C.S., has been appointed Medical Officer of Health for the Midsomer Norton Urban Sanitary District of the Clutton Union.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

REDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—Resident Surgeon. Salary £100 per annum, with apartments, board, and washing.

BOROUGH OF BLACKPOOL.—Medical Officer of Health for the Borough. Salary £300 per annum.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W.—Anæsthetist.

COUNTY OF CAITHNESS.—Medical Officer of Health. Salary £300, with £50 for travelling and other expenses, except forms and official stationery and postage. (Apply to the County Clerk, Thurso.)

DORSET COUNTY ASYLUM.—Assistant Medical Officer at the Second Asylum. Salary £120 per annum, with board and furnished apartments.

DERBYSHIRE ROYAL INFIRMARY.—Resident Assistant House Surgeon for six months. Salary £10 for the first six months. If re-elected, £25 for the second six months. Separate apartments, board, and washing provided.

EAST LONDON HOSPITAL FOR SICK CHILDREN, Shadwell, E.—House Surgeon. Board and lodging provided.

GENERAL INFIRMARY, Leeds.—Resident Medical Officer. Salary £100 per annum, with board, washing, and lodging.

GENERAL INFIRMARY, Leeds.—Resident Casualty Officer. Salary £100 per annum, with board, washing, and lodging.

GROSVENOR HOSPITAL FOR WOMEN AND CHILDREN, Vincent-square, Westminster.—Physician.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House Physicians.

JESSOP HOSPITAL FOR WOMEN, Sheffield.—House Surgeon. Salary £50 per annum, with board, lodging, and washing.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House Surgeon. Salary £70 per annum, with residence and maintenance in the house.

LUNATIC ASYLUM, The Coppice, Nottingham.—Assistant Medical Officer. Salary £100 per annum, with board, apartments, attendance, and washing.

Mr. G. RAYNOR, 132, Cheapside, E.C.—Medical Officer for the North-west Coast of Africa. Salary £80 for the first year, £100 second year. Board and apartments provided. Passage paid out and home.

METROPOLITAN DISPENSARY, Cripplegate.—Resident Medical Officer. Salary £50 per annum, with residence and an allowance for coals and gas.

NATIONAL SANATORIUM FOR CONSUMPTION AND DISEASES OF THE CHEST, Bournemouth.—House Surgeon and Secretary. Salary £120 per annum, with board and lodging.

NORTH-WEST LONDON HOSPITAL, Kentish-town-road.—Assistant Resident Medical Officer.

OLDHAM INFIRMARY.—House Surgeon. Salary £80.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Junior Assistant House Surgeon. Salary £50, with board, lodging, and washing.

VICTORIA UNIVERSITY COLLEGE, Liverpool.—Holt Professorship of Physiology. Salary £375 per annum, plus share of students' fees.

YORKSHIRE COLLEGE, Leeds.—Lecturer on Sanitary Engineering. Stipend £200, and certain fees.

Births, Marriages, and Deaths.

BIRTHS.

EDGE.—On June 16th, at Netley, Hants, the wife of Surgeon Major John Dallas Edge, Medical Staff, of a son.

DAVIDSON.—On June 10th, at White House, Teddington, the wife of Harold Davidson of a son.

COCKEY.—On June 15th, at The Limes, Little Waltham, Chelmsford, the wife of Dr. Percival Cockey of a son.

FROSSARD.—On June 12th, at Mortimer House, Bishop's Lydeard, the wife of Emilien E. Frossard, M.R.C.S., L.R.C.P. Lond., of a son.

HUME.—On June 8th, at 423, Kingsland-road, N., the wife of Dr. David Hume, Hanbury-street, E., of a daughter.

JONES.—On June 5th, at Merton House, Plantation-road, Oxford, the wife of Arthur Wentworth Jones, B.A., F.C.S., M.R.C.S., L.R.C.P., of a son.

MACDOWEL.—On June 12th, at the Mall House, Sligo, the wife of Effingham MacDowel, M.D., of twin sons.

PEAKE.—On June 15th, the wife of W. Pemberton Peake, M.R.C.S., L.R.C.P., of Wyggeston House, Leicester, of a daughter (Lily).

SHORE.—On June 15th, at Hornsey, N., the wife of T. W. Shore, M.D. Lond., of a daughter.

TIRARD.—On June 10th, at Weymouth-street, Portland-place, the wife of N. Tirard, M.D. Lond., of a son.

WHITELOCKE.—On June 9th, at Banbury-road, Oxford, the wife of R. H. Anglin Whitelocke, M.B., M.R.C.S., of a son.

MARRIAGES.

AITCHISON—STAVELEY.—On June 16th, at Ifield Church, Crawley, Sussex, Robert Swan Aitchison, M.B. Edin., to Jessie Georgina Annie Staveley, second daughter of the late George Augustus Pepper Staveley, B.C.S., of Woldhurstlea, Crawley.

BARKER—CLARKE.—On June 10th, at Christ Church, Sandown, Isle of Wight, Henry Martyn Barker, M.B., M.R.C.S., son of the late T. Herbert Barker, M.D., F.R.C.S., of Bedford, to Edith Emily, daughter of the Rev. Henry Clarke, Rector of Savanna la Mar, Jamaica.

BOXALL—LUCAS.—On June 10th, at St. Paul's, Clifton, Robert Boxall, M.D., M.R.C.P., of Weymouth-street, Portland-place, W., eldest son of the late Henry Boxall, F.R.C.S., of Wisborough-green, Sussex, to Eva Maud, youngest daughter of George William Lucas, of Netley House, Clifton.

CHILDE—SMITH.—On June 10th, at St. Mary Magdalene's, St. Leonards-on-Sea, Charles Plumley Childe, B.A., M.R.C.S., Southsea, eldest son of the Rev. G. F. Childe, M.A., St. Leonards, to Margaret, widow of the late Dr. A. J. Smith, of Kurseong, Bengal.

SNAPE—HAHM.—On June 3rd, at Marylebone Church, Ernest A. Snape, L.R.C.P. Lond., of Welbeck-street, W., to Mary, only daughter of the late F. Hahm, of Mexico, and of Mrs. Hahm, York-terrace, Regent's-park.

WACHER—FREND.—On June 11th, at St. Margaret's Church, Canterbury, Sidney Wacher, F.R.C.S., to Margaret Caroline, only daughter of the late George Royle Frend, of Canterbury.

DEATHS.

ATKEY.—On June 11th, at Walton Lodge, Worthing, William Thomas Atkey, L.R.C.P. Lond., aged 36.

BROWN.—On May 26th, at St. Sidwell's Villa, Exeter, Louie, the wife of Martin Luther Brown (in childbirth).

GRABHAM.—On June 13th, at his residence, Rochford House, Pontefract, Charles Grabham, M.B. Lond., M.R.C.S., J.P., aged 53.

LYON.—On June 5th, Felix William Lyon, M.D., King's College, Aberd., M.R.C.P. Lond., of North Charlotte-street, Edinburgh, aged 87.

SAWER.—On June 9th at Fairlea, Northam, Bideford, Thomas Sawer, M.R.C.S., late of Clifton, Gloucestershire, aged 77.

SMITH-SHAND.—On June 12th, at 17, Albyn-place, Aberdeen, James W. F. Smith-Shand, M.D., Regius Professor of Practice of Medicine, University of Aberdeen. Friends are requested to accept this intimation.

STRUTHERS.—On the 6th inst., at 39, Charlotte-street, Leith, James Struthers, M.D., F.R.C.P.E., aged 69 years. Friends will kindly accept this (the only) intimation.

WHYLOCK.—On June 12th, at Folkestone. Brigade-Surgeon Watkin Sandom Whylock, late 38th South Staffordshire Regiment, son of the late Major-General James Whylock.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, June 22.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Tuesday, Wednesday, Friday, and Saturday at the same hour.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.

LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Great Ormond-st.: 4 P.M., Mr. W. Arbuthnot Lane: Inflammation of the Middle Ear and its Complications (No. 1).—Royal London Ophthalmic Hospital, Moorfields: 1 P.M., Mr. W. Lang: Strabismus.

Tuesday, June 23.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic operations, 4 P.M.; Friday, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electrotherapeutics, same day, 2 P.M.

LONDON POST-GRADUATE COURSE.—Bethlem Hospital: 2 P.M., Dr. Theo. Hyslop: Legal Relations of Insanity.—Hospital for Skin Diseases, Blackfriars (the lecture will be delivered at the Examination Hall, Victoria Embankment): 5 P.M., Mr. J. Hutchinson: Elephantiasis and Allied Affections.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—9 P.M. Conversazione.

Wednesday, June 24.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M. Operations by the Obstetric Physicians on Thursdays at 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.

ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. Hector Mackenzie: Adherent Pericardium, with Clinical Cases.—Royal London Ophthalmic Hospital: 8 P.M., Mr. J. B. Lawford: Paralysis of Ocular Muscles.

Thursday, June 25.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.

LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Great Ormond-st.: 4 P.M., Mr. W. Arbuthnot Lane: Inflammation of the Middle Ear and its complications (No. 2).—National Hospital for the Paralysed and Epileptic: 2 P.M., Mr. Victor Horsley: Surgery of the Nervous System.—London Throat Hospital, Gt. Portland-st.: 8 P.M., Dr. Ed. Woakes: Mastoid Disease.

Friday, June 26.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. Hector Mackenzie: Thoracic Aneurysm, with Clinical Cases.—Bacteriological Laboratory, King's College: 11 A.M. to 1 P.M., Prof. Crookshank: Rabies, Tetanus, Glanders, Swine Fever, Septicæmia of Mice, Rabbits, and Birds (Sections of Septicæmia of Mice and various Cultivations).—Great Northern Central Hospital: 8 P.M., Dr. Galloway: Malignant Growths.

ROYAL INSTITUTION.—9 P.M. Professor Dewar will deliver the Faraday Commemoration Lecture.

Saturday, June 27.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Bethlem Hospital: 11 A.M., Dr. Theo. Hyslop: Clinical Demonstration.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 18th, 1891.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
June 12	30·38	N.E.	52	49	107	67	49	..	Overcast
,, 13	30·38	S.W.	58	54	119	79	50	..	Hazy
,, 14	30·23	W.	60	56	103	73	54	..	Cloudy
,, 15	30·03	W.	60	54	106	71	55	..	Hazy
,, 16	30·07	N.W.	62	55	115	72	52	·03	Cloudy
,, 17	30·20	S.W.	64	57	111	79	55	..	Hazy
,, 18	30·34	S.W.	68	62	111	77	60	..	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

LUNATIC ASYLUMS IN THE UNITED STATES.

THE "Census Bulletin" (No. 62) says:—"The total number of insane persons treated in both public and private institutions during the year 1889 was 97,535, while during the year 1881 there were 56,205 treated, showing an increase in the nine years of 41,330, or 73·53 per cent. This percentage of increase, when compared with the percentage of increase of population in the last decade—namely, 24·86 per 1000—does not indicate an increase in the proportion of insane persons to population, but rather a great increase in the amount of asylum accommodation provided, and a willingness on the part of the public to make full use of all the facilities thus provided. In 1880 there were thirty-eight private institutions in the United States for the treatment of the insane: twenty-five located in the North Atlantic States, twelve in the North Central States, and one in the South Atlantic States."

Mr. J. J. A. Raye.—Our correspondent undoubtedly exhibited great courage and self-sacrifice; but we must deprecate the hazarding of valuable lives in a procedure which can hardly ever be useful, and which, from the nature of the disease, nearly always fails in its object.

Mr. A. W. Harker should apply for information to the Secretary of the Pharmaceutical Society, Bloomsbury-square, W.C.

ON CLEANING MICROSCOPE SLIDES AND COVER-GLASSES.

To the Editors of THE LANCET.

SIRS,—Bacteriologists and others who find themselves with accumulations of microscope slides may be glad of the following hint for cleaning them. It is not given in any text-book that I can discover. Instead of warming the slides one by one over a flame, pushing off the cover, and then scraping away the balsam and cleaning with alcohol, I put all my slides together into a saucepan with a lump of washing soda, and boil them. The heat of boiling is enough to soften most cements and all ordinary resins used for mounting, and I then fish out the cover-glasses one by one, push off the covers, and put them back. The action of the soda is to convert the balsam or other resin into a grumous mass, which is easily wiped off with a little rinsing. Cover-glasses can also be recovered for future use in the same way if desired. I think this method may be of service to laboratory attendants. Neither do I find anything on the surface of new covers and slides which will resist the action of hot water and soda; and so I prefer this way to the use of strong sulphuric acid and alcohol, or the other methods given in the text books. The exact quantity of soda to be used is immaterial; a piece about the size of a mandarin orange to half a pint of water will do.

I am, Sirs, yours faithfully,

Brook-street, W., June 4th, 1891. J. B. NIAS, M.B., M.R.C.P.

HOMES FOR THE DYING.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of last week you referred to an appeal for refuges for dying patients. These are, indeed, sadly wanted, and we must all sympathise with, and wish success to, the proposed scheme. I should not, however, have troubled you with a letter upon the subject but for one reason. That appeal, if it be the one I have seen, implies, if it does not actually assert, that no such institution had existed in London till, a very few years ago, a small house was established under the name of "Freidenheim." This is not correct. The Hospital of St. John and St. Elizabeth, 50, Great Ormond-street, was founded as long ago as 1856, for the very purpose of receiving patients suffering from incurable diseases that must end in death, and those nearest to death are the first selected for admission. Patients of another class are, indeed, also received—viz., those who have disease of so protracted a character that ordinary hospitals cannot keep them, but the dying have always been specially chosen. There are fifty beds, and fully half are usually occupied by the very class for whom the present appeal is being made. Of course, from twenty-five to thirty are a small number; but even so, the amount of suffering relieved during these many years may well be imagined. There is a medical and surgical staff attached to the hospital, while the fact of the nursing being in the hands of Sisters of Mercy may be taken as a guarantee that all that kindness and gentleness can do is done. The sisters are Catholic Sisters; but patients are received of any religion, and with no interference whatever with their belief and practices. The existence of this institution may be a starting-point for the movement now proposed; at least, it has the experience of many years, and I am sure the Sisters will give any information that will assist in this charitable work. As one of the surgeons and treasurers of the hospital I ask your insertion of this letter. I remain, Sirs, your faithful servant,

Jermyn-street, June 15th, 1891. EDW. TEGART.

ASEPTIC HYPODERMIC SYRINGE.

To the Editors of THE LANCET.

SIRS,—We notice a letter in your issue of May 23rd referring to the simple aseptic hypodermic syringe issued by us according to the suggestions of Dr Abraham. In this letter a statement is made that the syringe referred to by Dr. Abraham is not new in principle, but an infringement of Messrs. Arnold and Sons' patent. We would beg to point out that the only feature coming within the meaning of Messrs. Arnold and Sons' patent specification is that the needle itself fits directly on to the pointed end of the glass barrel. The important features of the simple aseptic syringe do not depend upon the point covered by Messrs Arnold's patent specification. Immediately we learned that the fitting of a needle directly on to the glass tube of a hypodermic syringe was part of a patent specification belonging to Messrs. Arnold and Sons, we arranged to pay a royalty for use of the same in connexion with the simple aseptic hypodermic syringe as suggested by Dr. Abraham. Although we have arranged to pay this royalty, we find that Dr. Koch's syringe, which anticipates the feature claimed by Messrs. Arnold and Sons, was illustrated in the catalogue of Mr. H. Windler with the needle fitted on to the glass barrel of the syringe in 1888, or two years before the date of Messrs. Arnold and Sons' patent for Dr. Pearse's suggestion. It would appear therefore that this suggestion for a needle to fit on to the glass barrel of a hypodermic syringe is not new, but has been used both in this country and on the Continent for several years without question. We have always scrupulously avoided trespassing upon either the legal or moral rights of other manufacturers; and if Messrs. Arnold and Sons have either legal or moral right to the exclusive use of the system of fitting the needle directly on to the glass barrel, we shall respect their rights. We are, Sirs, yours very respectfully,

London, June 10th, 1891. BURROUGHS, WELLCOME, & Co.

HOSPITAL STATISTICS.

To the Editors of THE LANCET.

SIRS,—I should be glad to elicit opinions as to the most suitable method of calculating hospital mortalities. I find that, simple as this matter would appear to be, considerable variation exists in the methods of calculating the annual mortality for purposes of statistical reports. Following the Statistical Committee of the Metropolitan Asylums Board, I have adopted the method of the Registrar-General, i.e., "Divide the deaths multiplied by 100 by half the sum of the admissions, discharges, and deaths for the year." Some, however, state the mortality on "cases admitted" during the year alone, others calculate it on "cases treated" during the year, and so on. Uniformity on this point is desirable, some value probably attaching to reliable hospital statistics. I should like to obtain your views and that of any of your readers interested in statistical matters on this point.

I am, Sirs, yours faithfully,

City Hospital South, Liverpool, May, 1891. C. KNOX BOND.

"A WARNING."

To the Editors of THE LANCET.

SIRS,—The person referred to by Dr. Nias in your last issue as having represented himself to be my son is a swindler and impostor. I trust the police will soon get hold of him.

I am, Sirs, yours faithfully,

Dublin, June 17th, 1891. C. A. CAMERON.

"THE INFLUENZA AS AN ADVERTISING MEDIUM."

To the Editors of THE LANCET.

SIRS,—Our client, Dr. G. M. Lowe, C.M., M.D., late County Analyst, Lincoln, has consulted us with reference to the statement which appears in your issue of the 13th inst. under the above heading. We are instructed to inform you that the handbill you refer to was not only not issued by Dr. Lowe, but was issued entirely without his permission or knowledge. The bouillon was sent by the Company to Dr. Lowe for analysis, and was analysed by him in the usual way, and he had not the remotest idea that such analysis was to be used in the obnoxious manner in which it has been. The issue of the handbill has caused Dr. Lowe very great annoyance, and as soon as the matter was brought to his notice he at once telegraphed to the company to stop any further issue of the handbill, which they promised to do. You will therefore see that your strictures on Dr. Lowe are altogether uncalled for, and we must request you to insert this letter in your next issue.

We are, Sirs, yours faithfully,

New Road, Lincoln, June 16th, 1891. H. A. BURTON & SCORER.

*** We have great pleasure in giving insertion to the above disclaimer, and sympathise with Dr. Lowe in the annoyance to which he has been subjected. Our criticism was founded on the actual handbill, which was before us.—ED. L.

ONE OF THE EFFECTS OF THE MORNING COLD BATH.

To the Editors of THE LANCET.

SIRS,—In the past few years several patients have come to me complaining that they from time to time, especially in winter, in the early part of the day, have expectorated mucus tinged with blood. In each case there was no family history of phthisis, the temperature was normal, there were no bacilli discoverable in the sputa, there was no loss of strength or weight, and the chest-sounds were healthy. The men, however, were not of a vigorous type, and they were all accustomed to have a cold bath summer and winter. It seemed likely, especially in winter, that the sudden application of intensely cold water to the whole surface of the skin too suddenly raised the internal blood-pressure, and hence the oozing of blood through the walls of the capillary vessels lying beneath the lining membrane of the throat or the larynx, or possibly the lungs. In any case, whatever the true explanation may be, the fact stands out that the unpleasant symptom disappeared as soon as the temperature of the icy cold water was reasonably increased. The practice of taking a cold bath is so universal nowadays that it is perhaps as well to know that although the strong man may indulge in it with unmixed benefit, it may cause in the weak man a symptom which fills him with anxiety.—I am, Sirs, yours faithfully,

Chelsea, June 15th, 1891. THEODORE HEBB.

Mr. J. M. B. (L.S.A. 1887).—The main question put to us is a legal one. Speaking professionally, it would not be satisfactory to commence practice. Our correspondent does not seem to have been treated very liberally. But the contract was one that was very difficult to work. It is ill defined, and was not perfectly expressed on the door-plate to the public. Such arrangements are sure to work unsatisfactorily to both parties. If matters cannot be adjusted on an amicable and well-defined basis, it will be better to relinquish the whole arrangement.

PROPHYLAXIS OF INFLUENZA.

To the Editors of THE LANCET.

SIRS,—I think I can bring forward two facts which give colour to the idea that taking quinine and arsenic affords some protection against influenza. The first is that last year I gave a mixture containing those two drugs to some dozens of people as a prophylactic, and this year to a smaller number, and on neither occasion did any of them, I believe, contract influenza. The second fact is that in a family of nine children all were attacked last month by influenza but one, and he was taking at the time an arsenical mixture for an affection of the skin. He was nearly of the same age as several of the others, and living in the same rooms and under the same conditions. It seems, I think, reasonable to suppose that quinine and arsenic, two such powerful antiseptics, might prove inimical to the development of the microbe which probably causes influenza, perhaps the more so as there appears to be some similarity between that disorder and certain malarious affections, and also reasonable to expect that those drugs would fortify the system against the disorder. I am, Sirs, yours truly,

Finchley-road, N.W., June 13th, 1891. EDW. G. GILBERT.

Gamma.—The questions are strictly legal ones, and we hesitate to answer them positively; but we should be disposed to answer all of them in the affirmative. Legal proceedings, over small amounts, are to be much avoided; but we cannot help thinking that our correspondent has been hardly used, and has a substantial claim to more than mere assistant's pay, considering that he did full work at a time of high pressure, and, in doing so, contracted a dangerous and infectious disease.

Xavo (Edinburgh) will be much obliged if any of our readers will inform him where he can obtain the past examination papers of the Indian Medical Service, and the books that should be read for the same, especially in connexion with the Natural Science Branch.

C. H. should consult his medical adviser.

PARAFFIN LAMPS.

To the Editors of THE LANCET.

SIRS,—The danger of these lamps has been brought before the public lately. I should like to find out through your columns what is the experience of others as to the working of patent extinguishers, or whatever the apparatus is called, which is supposed to act automatically and put out a lamp if upset. All my lamps are fitted with some safety apparatus, and when the lamps are just lit they go out easily if the safety apparatus is touched; but after a lamp has been long burning I have worked the lever like a pump handle to get the lamp to go out. The flame seems out, or half out, and then when the lever is worked in the other direction it will flare up again and again. It may be that the metal swells with heat, or it may be owing to the trimming. Anyhow, if a lamp long lit was upset, I doubt its going out always. As to the reservoirs, transparent glass ones in a position where they can be well seen are certainly more likely to be filled up than metal ones, but that may not counterbalance other disadvantages.

I am, Sirs, yours truly,

June 16th, 1891. M.D EDIN.

ERRATUM.—In a short abstract of the Bishop of Bedford's sermon, published in THE LANCET second Special Supplement in aid of the appeal made on Hospital Sunday, the seventh line contains a misprint which, though obvious enough to the careful reader, is calculated to mislead. The words "a remarkable fact that the Vicar of the parish (the Rev. J. F. Kitto) was unable to plead for the fund" should read "a *regrettable* fact," &c.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Lauder Brunton, London; Mr. J. B. Browne, London; Mr. Birchall, Liverpool; Mr. Burridge, London; Mr. Buller, Beverley; Mr. Bannatyne, Leeds; Mr. Blewitt, London; Mr. Barford, Berks; Mr. G. S. Bigg, London; Mr. W. Cheyne, London; Sir C. Cameron; Mr. Chavasse, Birmingham; Dr. Cruise, Dublin; Mr. Collingham, Hull; Dr. J. M. Clarke, Clifton; Mr. C. Campbell, Saddleworth; Dr. Calder, Forbes, N.S.W.; Mr. Carr, Edinburgh; Surg.-Major Dobie, London; Mr. M. Dobbs, London; Mr. S. Dawson, Cockermouth; Mr. H. R. Davies, London; Mr. Day, Bristol; Dr. Davies, Ebbw Vale; Mr. Erskine, Glasgow; Dr. Eccles, London; Sir J. Fayrer, London; Dr. Francis, Wandsworth; Dr. J. A. Fleming, London; Rev. C. E. Few, Sevenoaks; Mr. Gubb, London; Dr. Gilbert, Hampstead; Mr. Gravatt, Cheapside; Mr. Grün, London; Mr. Heard; Messrs. Hewlett and Son, London; Mr. Hornibrook, London; Surg.-Major Hoysted; Mr. T. Hebb, London; Mr. Jack, London; Mr. T. Jones, Manchester; Messrs. Keene and Ashwell, London; Messrs. T. H. Lloyd and Co., Leicester; Mr. W. A. Lane, London; Messrs. Lee and Martin, Birmingham; Mr. Mantin, Paris; Dr. McDougall, Arin; Dr. Mattison, Brooklyn; Dr. S. Mackenzie, London; Messrs. Mitchell and Co., London; Mr. Mackenzie, Intake; Dr. Nason, Nuneaton; Mr. Potter, Collumpton; Dr. Parsons, Dover; Dr. Perigal, New Barnet; Mr. R. Russell, Haslemere; Mr. W. Rivington, London; Messrs. Riddle and Co., London; Mr. Ryan, London; Dr. Ridge, Enfield; Mr. G. Q. Roberts, London; Mr. Robinson, Sheffield; Mr. Stamford, Tunbridge Wells; Mr. Sayer, Brighton; Dr. N. Smith, London; Mr. Stillwell, Lambeth; Mr. Stables, Ashby-de-la-Zouche; Messrs. Tannin and Co., Dublin; Mr. Thorpe, London; Mr. Thomas, Caerphilly; Dr. Bezly Thorne, London; Mr. E. Tegart, London; Mr. Taylor, Derby; Dr. A. Thompson, Ulverston; Mr. Wand, Leicester; Enquirer; Morris Tube Co., Haymarket; A. B., London; M.S., H. P. N.; Secretary, Norfolk County Asylum; Comus, London; M.D. Edin.; Secretary, County Asylum, Hants; National Sanatorium, Portsmouth; Secretary, Earl's Court; L.R.C.P. & S.Ed; L.R.C.P., M.R.C.S.; House-Surgeon; *Times* Office, Blackpool; Subscriber.

LETTERS, *each with enclosure*, are also acknowledged from—Mrs. Asinelli Geneva; Mr. Butler, Nether; Mr. Brown, Exeter; Mr. Baron, North Lincolnshire; Dr. Bottentuit, Plombière; Dr. Berry, Shepherd's Bush; Miss Booth, Kensington; Mr. Butcher, Brussels; Mr. Cornish, Manchester; Mr. Cochrane, Wigtonshire; Mr. Davidson, Teddington; Dr. Deely, Blackpool; Mr. Diver, Dunmow; Mr. Deack, Newmarket; Dr. Drake, Manchester; Messrs. Eckersky and Co., Manchester; Mr. Ely, Aberravenny; Mr. Foster, Knowle; Mr. Finlay, Longford; Mr. Gibson, Worcester; Dr. Godfrey, London; Miss Green, Huddersfield; Mr. Galbraith, Norfolk; Mr. Harper, Bath; Mrs. Hitch, St. Leonards-on-Sea; Dr. Hinde, Southwold; Mr. Hutchinson, Upper Sunbury-on-Thames; Dr. Hargreaves, London; Mr. Heywood, Manchester; Mr. Hubbard, Cheshire; Mr. Leith, London; Mr. Lockwood, Huddersfield; Mr. Logan, Glasgow; Messrs. Mawson, Son, and Co., Newcastle-on-Tyne; Mr. Meier, Redhill; Messrs. Maclean and Sons, Edinburgh; Mr. MacMahon, Cork; Mr. Madden; Mr. Maddick, London; Mr. Macdonald, Glasgow; Dr. Nesfield, Manchester; Mr. O'Meara, Loughborough; Dr. Orr, Godalming; Mr. Osborne, Stockport; Mrs Osborne, Edgeley; Mr. Polson, Sutherlandshire; Mr. Plummer, Durham; Dr. Packman, Rochester; Miss Powell, Finsbury-park; Mr. Robson, Acton; Mr. Ross, Belfast; Dr. Renton, Edinburgh; Messrs. Rowntree and Co., York; Dr. Roberts, Peckham Rye; Dr. Suzuki, Tokio; Mr. Shore, Hornsey; Messrs. Stronach and Co., Aberdeen; Mr. Smith, Manchester; Messrs. Squire and Sons, London; Dr. Sankey, Salop; Mr. Tyte, Minchinhampton; Mr. Tully, Hastings; Mr. Tate, St. Neots; Mr. Twigg, Rotherham; Mr. Taylour, Preston; Mr. Thomas, Newport, Mon.; Mr. Thin, Edinburgh; Mr. Ure, Oldham; Dr. Windle, Halifax; Mr. Walker, Canada; Mr. Williamson, Lincoln; Dr. White, Bombay; Mr. Walker, Ashton-under-Lyne; Mr. Warde, Hants; Mr. Weatherby, Hull; Mr. Wilkie, Great Clacton; Dr. W., Hull; M.A., London; Kensington, London; Secretary, General Hospital, Staffs; E. A., London; Joyes' Sanitary Compounds Co., London; Secretary, General Hospital, Notts; Dahl's Agency, London; Golf, London; G. P, Clapham; Devon and Exeter Hospital; C. E. S, Bradford; Senex, London; Secretary, St. Mungo's College, Glasgow; Self Reliance, London; Publisher, *Staffordshire Sentinel*; J. R., Leicester; W., London; S. L., London; Stockport Infirmary; F. G. W., London; Physician, Leeds; Superintendent, London; M. S., London; A. B. C., Bath; J. W. B., London; M. S., Birkenhead; A. C. (Forceps), London; Medicus, Halifax; B. T. W., London; Kappa, London; F. V. D, London; Pax, London; Beta, London; Suburb, London; G., South Norwood; Fides, London; H. E., London; P. G., London; Invicta, London; Alpha, London; Tennis, London; Johannes, Norwich; Colocynth, London; M.O.H., Liverpool; Physician, London; H. T., London.

NEWSPAPERS.—*Albany Journal (N.Y.), Yorkshire Post, Liverpool Daily Post, Bristol Mercury, Scottish Leader, Sunday Times, Builder, Broad Arrow, Manchester Guardian, Dundee Advertiser, City Press, Chemist and Druggist, West Middlesex Standard, Dorset County Chronicle, Law Journal, Spectator, Pharmaceutical Journal, Surrey Advertiser, Saturday Review, Mining Journal, Architect, West Middlesex Advertiser, Hobart Mercury, Brisbane Telegraph, Glasgow Herald, Scotsman, Le Temps (Paris), Herefordshire Mercury, Windsor and Eton Express, Reading Mercury, North British Daily Mail, National Bulletin, Sheffield Daily Telegraph, Weekly Free Press and Aberdeen Herald, Daily Standard Union (Brooklyn), Insurance Record, Windsor and Eton Gazette, Western Mail, Guy's Hospital Gazette, Croydon Chronicle Times of India, Midland Evening News, Essex Telegraph, Lincolnshire Chronicle, Citizen, Shrewsbury Journal, Rock, Derbyshire Advertiser, Isle of Man Times, Leighton Buzzard Observer, Kendal Mercury, Peterborough Express, Batley Reporter, Tonbridge and Tunbridge Wells Free Press, Walsall Advertiser, European Mail, Clonmel Chronicle, Ormskirk Advertiser*, &c., have been received.

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